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ABSTRACT

This study sought to determine whether there are national training needs among staff of conductive education programs in New Zealand. Conductive education is a unified system of education for children and adults with a motor disorder whose disability has been caused by damage to the central nervous system. The study, which focuses primarily on programs employing Hungarian-trained conductors, shows conclusively that there are clearly defined training needs among coordinators/managers, program chairpersons and committees, conductors, specialists, parents, and other staff. An approach to training that would fulfill these needs is presented, with three levels including short courses, undergraduate courses, and postgraduate courses. Recommendations are made for developing a national curriculum, while recognizing that each program is responsible for its own in-house staff training and development. Recommendations are addressed to the New Zealand Foundation for Conductive Education, which is regarded as the appropriate organization to oversee the development of a national curriculum plan. The report provides an overview of conductive education, a research review, the status of conductive education in eight countries, descriptions of nine New Zealand conductive education programs, interview forms, the curriculum of the Andras Peto Institute for Conductive Education of the Motor Disabled in Hungary, and a conductive education graduate training curriculum from the University of Melbourne (Australia). (Contains approximately 100 references.) (JDD)

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CONDUCTIVE EDUCATION

*Feasibility Study on Developing
a National Curriculum Plan for Those Working in
Conductive Education in New Zealand*

Graham A. Wagner



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Graham A. Wagner

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AN APOLOGUE

"The next night from the Flock came Kirk Maynard Gull, wobbling across the sand, dragging his left wing, to collapse at Jonathan's feet.

_Help me - he said very quietly, speaking in the way that the dying speak. I want to fly more than anything else in the world ...

_Come along then said Jonathan. Climb with me, away from the ground, and we'll begin.

_You don't understand. My wing. I can't move my wing.

_Maynard Gull, you have the freedom to be yourself, your true self, here and now; and nothing can stand in your way. It is the Law of the Great Gull, the law that Is.

_Are you saying I can fly?

_I say You are free.

As simply and as quickly as that, Kirk Maynard Gull spread his wings, effortlessly, and lifted into the dark night air.

The Flock was roused from sleep by his cry, as loud as he could scream it, from five hundred feet up.

_I can fly! Listen! I CAN FLY!"

From *Jonathan Livingston Seagull* by Richard Bach¹

¹ Thanks to the Pető Institute for pointing out this extract from Bach's book, *Jonathan Livingston Seagull*.

EXECUTIVE SUMMARY

Conductive education is a unified system of education for children and adults with a motor disorder whose disability has been caused by damage to the central nervous system. In recognising the interdependence of components of development, it focuses on the person as a whole and aims to assist each individual to achieve his or her maximum independence within society.

As a consequence of the worldwide interest in conductive education, and its development in New Zealand, concern has been expressed that those people working in conductive education programmes should be adequately trained. By its very nature, conductive education requires staff in centres offering such programmes to deal with a multitude of interdisciplinary issues arising from its recent introduction into the New Zealand health and education systems. As might be expected, the introduction of alternative ways of working with people with cerebral palsy, including those with multiple disabilities, has resulted in adjustment problems, due usually to un-met training needs.

This study was designed to determine whether there are national training needs among people connected in some way with the running of conductive education programmes, whether these be Hungarian-trained conductors, support staff, or others with an interest in conductive education. Although the main focus of this report is on programmes employing Hungarian-trained conductors, other alternative programmes that use conductive education principles as part of a holistic approach were also included.

The study shows conclusively that there are clearly defined training needs among co-ordinators/managers, programme chairpersons and committees, conductors, specialists, parents, and other staff of these programmes; it outlines an approach to training that would realise these needs at three levels of the education and training system - short courses, undergraduate courses, and postgraduate courses. General and specific recommendations are made for developing a national curriculum, at the same time recognising that each programme is responsible for its own in-house staff training and development.

Based upon the views of those interviewed, it is recommended that training at all three levels is feasible; however, the development of undergraduate courses for conductors in New Zealand is seen at this stage as a long-term aim requiring careful planning which also takes into account developments overseas, especially in Australia. In taking this view, it is argued that New Zealand is a small country with a strong contribution from Hungarian conductors which is likely to continue for some years to come.

The study confirms the seminal role of the New Zealand Foundation for Conductive Education, not only in promoting conductive education in New Zealand but, more importantly, in planning and co-ordinating training both at the national and local levels. Consequently, recommendations in the study are addressed to the Foundation which is regarded as the appropriate organisation to oversee the development of a national curriculum plan for training those working in, and associated with, conductive education programmes. It is suggested in the study that the proposed curriculum plan should not only include a course of action for introducing, or supporting,

the training of those working in conductive education, but that any such training initiative should fit comfortably into the New Zealand education and health systems.

SPONSORS OF THE STUDY

Principal sponsors of this study were The New Zealand CCS Incorporated and the National Working Party on Conductive Education with financial support from the J.R. McKenzie Trust, the Roy McKenzie Foundation, and research support from the New Zealand Council for Educational Research.

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Graham Wagner
February 1994

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GLOSSARY OF KEY TERMS

Adaptive model: An adaptive (Type B) model of conductive education describes the practice of conductive education outside the Pető Institute, involving at least one full-time Pető-trained conductor who is responsible for the development and daily implementation of all group sessions in the programme. The main distinction between the adaptive model and the pure model is that the Adaptive model has no on-going education and training of student conductors in an institutional setting. Even so, programme teaching sessions closely mirror what goes on in the Pető Institute while at the same time allowing adaptations for local conditions.

Alternative model: In the alternative (Type C) model of conductive education there is no permanent full-time conductor to give daily and individual direction to the local educators and therapists who plan and run the sessions using conductive education principles and practices. These programmes are best described as "holistic" programmes based on conductive education principles.

Conductive Education: Conductive education is a unified system of education for children and adults with a motor disability whose disability has been caused by damage to the central nervous system. Conductive education recognises the interdependence of components of development and focuses on the person as a whole, not on individual systems. The aim of conductive education is to achieve "orthofunction" (the opposite of dysfunction), that is, the ability to walk, play, learn, socialise, and function in society with the maximum independence that each individual is capable of realising. It is often described as "a life style" for children with motor disabilities and their families.

Conductor: This word signifies a Hungarian - trained conductor (i.e., trained at the András Pető Institute). Through their 4-year training the conductor combines the skills of both the therapist and the educationalist in a holistic integrated fashion in such a way as to achieve orthofunction for those with motor disabilities. This does not mean that their training is equivalent to that of a therapist and a teacher combined, for these specialists would have a more intimate knowledge of their curriculum than the conductor. The conductor uses an interdisciplinary educational approach instead of a purely educational or purely therapeutic approach. In this way the conductor/educator facilitates the development of optimum independence in children and adults with motor disorders. In New Zealand there are 11 known conductors, and of these only one is not at present practising.

Co-ordinator/Manager: A paid, local-programme-based administrator responsible for the day-to-day running of a New Zealand programme. The co-ordinator/manager may also be called a manager or co-ordinator.

Daily schedule: The routine, prescribed way for carrying out all activities of daily living (e.g., getting out of bed, toilet training, washing, teeth cleaning, and so on).

Daily timetable: The means by which the conductors and day/residential children and their actions are integrated into the conductive education system. The daily timetable includes the daily schedule in which are embedded three categories of activities: task series, school programme and free time.

Facilitation: The process by which children, regardless of individual differences, actively participate in and complete all parts of the daily schedule, task series and school programme set for the group to the minimum extent necessary for the child to complete the task facilitated by the conductor. A key element in facilitation is the focus on the daily incremental improvements in a child's performance through its judicious use and then gradual withdrawal (See for example, Bairstow, Cochrane and Hur, 1993, p. 44).

Free time: The time allocated to a child as a consequence of their actions whereby they can learn ways of dealing with free time.

Group: A group is a number of children or adults with a similar needs who the conductors believe will benefit from each other's company during education sessions (e.g., the ability to progress at the same speed - socialisation). Generally the groups are age-related (e.g., bindy [i.e., between baby and kindergarten], kindergarten, primary school, etc.), but grouping may be related to a type of disability (e.g., spina bifida, multiple sclerosis). As members leave the group, a core always remains to ensure continuity. The groups are part of a system of groups, e.g., baby groups --> kindergarten groups --> school groups -->.

Holistic: Holistic medicine is a doctrine of preventative and therapeutic medicine which emphasizes the importance of regarding the individual as integrated into his/her social, cultural and environmental context rather than as a patient with isolated malfunction of a particular system or organ. Though the word "holistic" has recently become fashionable in a number of different ways, the underlying philosophy is nothing new. In holistic approaches to human behaviour emphasis is placed upon ensuring that learning (or treatment) deals with all of the physical, emotional, social, spiritual, and economic needs of the learner (or patient). Likened to a system of comprehensive care a holistic approach takes into account all factors that may have some bearing upon the performance of an individual including heredity, nutrition, physical activity, stress, family relationship, medical care, spiritual health, and living and working conditions. (*The Oxford Companion to Medicine*, Vol 1, Edited by J. Walton, P B Beeson, R Bodley Scott. Oxford New York, Oxford University Press 1986.)

In group: This term describes all that goes on in a group session or sessions - the "hands on" work done in the centre by the conductor and support staff.

Leader: The person who takes the leadership role in an alternative (Type C) model programme. Usually this is a teacher or therapist who acts very much like a conductor but who has not been trained in the Pető Institute in Hungary.

MOIRA: A private conductive education training provider in Hungary called the MOIRA Unlimited Company for Conductive Education, founded on October 12, 1987.

Motivation: For those working in conductive education, motivation has a specific meaning: "The child's motivation is also influenced by the presence in his group of healthy examples with whom to identify" (Hari and Tillemans, 1984, p. 19).

Orthofunction: The long-term aim of conductive education, orthofunction is defined in Cottam and Sutton (1986) as "... the ability to function as members of society, to participate in the normal social settings appropriate to their age, kindergarten, school, college or work, without wheelchairs, ramps, special furniture, toileting arrangements, etc."

Out group: This term describes the extension of the in-group work by the conductors and support staff outside the classroom. Out-group activities concern home visits, assessments, session planning, and individual development planning but not routine administration or general programme planning. In other words, out group means those activities that are directly related to the work of a particular group and those in it, carried out when the children are not present.

Pető Institute: A shortened title for The András Pető State Institute for Motor Disorders and Conductors College, Hungary.

Postgraduate: A term that describes training that follows basic training in a professional area. Basic training in this context ranges from certificate through diploma to degree study, not necessarily undertaken in a university or polytechnic setting. Postgraduate study follows after the basic training for a professional body of workers.

Programme: A set of structured activities where a conductor, or holistic leader, together with support personnel are formally engaged in applying the principles of conductive education to the education of children with motor disorders. The programme is usually funded partly by the state and partly from voluntary donations raised by a trust, foundation, or society which manages the programme.

Pure model: There is only one place in the world where the pure (Type A) model of conductive education operates. That place is the András Pető Institute of Conductive Education in Budapest, Hungary. The principal distinguishing features of the Pure model are its integration in the Hungarian culture, its use of groups of conductors for each session, the utilisation of conductor training in the overall operation of the institute, and the institutionalised nature of the work. For those running conductive education programmes outside the Pető Institute the pure model serves as the reference point for comparison. Not everyone sees the Pure model as the "Ideal" model. For example, the "institutionalised" nature of the Pure model is an anathema to many outside Hungary.

R&D: An abbreviation for Research and Development.

Sessions: Each programme runs different group sessions based on the needs of children (or adults) with specific motor disabilities. The sessions may be intensive and frequent during the week, or less

intensive and infrequent. The length of a session usually varies from 1 to 5 hours depending upon the group. Sessions can be offered as often as every weekday, or as little as once a week, depending upon the availability of conductors and support staff.

School programme: This refers to both the early childhood and school curriculums, which in Hungary include teaching, arithmetic, reading, writing, and environmental knowledge. In conductive education the task series is fully integrated into the school programme during school hours while things learnt at school are integrated into out-of-class activities.

Short courses: A term used in the present study to describe any kind of limited-term formal training (either on or off the job) usually from 20 to 50 hours in duration. Such courses are designed to meet the current training needs of the different staff groupings in a programme. The training provider may be programme staff (if they have the expertise), the New Zealand Foundation for Conductive Education, or some other provider from outside the programme.

Specialist: Used in this study, the term means a qualified professional (other than a conductor) who contributes in some way to the functioning of the programme. This includes:

- (1) Doctors (principally paediatricians) who refer parents to the programme;
- (2) Therapists who work in some cases within an established programme (e.g., occupational therapists, physiotherapists, speech language therapists, visiting neuro-developmental therapists, orthotists, and psychologists) or who, through their professional work, come in contact with conductive education programmes;
- (3) Certificated teachers (principally early childhood educators); and
- (4) Any others who bring their professional expertise to bear upon the programme from time-to-time.

Task Series: Task series are aimed at teaching children to gain control over their musculature "... thereby facilitating the acquisition of other motor skills which depend on the underlying motor repertoire; e.g., the skills required for activities of daily living. Each task series is a sequence of actions composed of postures, postural changes, upper limb movements and lower limb movements" (Bairstow, Cochrane and Hur, 1993, p. 40). According to Hari and Akos (1988) "... each partial task facilitates the performance of the next and so leads on, step by step, to a goal not immediately within the capability of patients with a specific dysfunction" (p. 165).

Therapy: The treatment of illnesses of the mind or body.

Traditional therapist: A professional person trained in physical, psychological, or other therapy at a tertiary institution such as a university, polytechnic, college of education, or medical school. In this study, the therapists mainly involved in conductive education programmes are physiotherapists, occupational therapists, and speech language therapists.

INTRODUCTION

Background to the Study

Given the considerable recent nationwide interest in conductive education and the availability in New Zealand of conductors trained at the András Pető State Institute for Motor Disorders and Conductors College in Hungary (hereafter called the Pető Institute), public and professional attention has recently been focused on the validity of integrating local services into the conductive education programmes in this country. One of these services involves the provision of training for those working in conductive education in New Zealand.

Training as such became a topic of interest in early 1991 and led to the release of a discussion paper by Penny Jorgensen (1991), founding secretary and chairperson of the Positive Action for Conductive Education group (PACE (NZ) Inc.). In her paper, which is mentioned in more detail below, Jorgensen put forward a view of short-, medium- and long-term training which encompassed teachers, specialists, parents, and conductors and, by doing so, heightened interest in systematic training which undoubtedly has had a bearing upon initiating the present study.

In late 1992, and at the beginning of 1993, when approached by the NZCCS to put forward a research proposal to develop courses for training those people working in conductive education programmes, the New Zealand Council for Educational Research (NZCER) considered this request in the context of curriculum research based on a traditional model of R&D. What started out as an R&D exercise changed to a feasibility study when it was realised that the education and training of conductors in particular was a somewhat controversial topic. Thus, before curricula were developed, or adapted, it was decided by the National Working Party on Conductive Education (NWPCE), that it would be pertinent to investigate whether training was feasible in the first place.²

Factors contributing to this change in focus were:

1. Concern by Rowena Somogyváry (in Hungary) and Anne Meade (on a European study tour) about the cross currents emanating out of the debate over the knowledge base underpinning conductive education in Europe in late 1992.
2. Some bad press, which intensified in February-March 1993, about the effectiveness of conductive education at the Birmingham Institute of Conductive Education.
3. Cautions from a wide variety of people about the success of transplanting a Hungarian-based programme to New Zealand without an appropriate model to follow.

² See Graham Wagner's 1993 research proposal entitled "The feasibility of developing a national curriculum for those people working in the field of conductive education in New Zealand." Wellington: NZCER.

4. Interest being shown by those involved in running conductive education programmes in New Zealand about what was happening in Australia, indicating the possibility of an Australasian approach to the education and training issue.

In sum, in using the R&D curriculum model, with a first-step preliminary investigation, it is **assumed** that a decision has been made to develop conductive education curricula in New Zealand (or Australasia); the researcher then investigates barriers that will need to be overcome which might inhibit this development, progress on acceptable strategy which will lead to the implementation of curricula and then sets about ensuring that the plan works in practice. On the other hand, when conducting a feasibility study, the researcher **does not make any such assumption** and indeed investigates, among other things, not only whether it is possible to develop conductive education curricula for New Zealand but whether it would be expedient to do so. In relation to the factors mentioned previously, a feasibility study appeared the best option in early 1993.

As a consequence of meetings with representatives of the NWPCE, it was proposed by the NZCCS Incorporated, and confirmed at a National Working Party on Conductive Education meeting on 5-6 May 1993, that the time was right to investigate the feasibility of providing suitable New Zealand-based preservice and inservice training programmes to train those supporting the New Zealand based Hungarian conductors in their professional work. In addition, it was also proposed that such a study investigate the long-term prospects of developing a Pető-style conductive education training programme based upon New Zealand conditions and culture. Furthermore, in investigating the feasibility of developing such a range of broad-based training, for those involved in conductive education in New Zealand, it appeared appropriate to take into consideration similar trends in Australia and the United Kingdom. Then, if developing a national curriculum plan were feasible, it was argued this study should seek to determine appropriate opportunities for such training and in the process identify potential training providers and training requirements.

FOCUS OF THE STUDY

Objectives

In general terms this study seeks to:

1. Search and comment on the available literature in the field underpinning conductive education theory and practice.
2. Review/examine conductive education training programmes in Hungary.
3. Compare and review the development of training in conductive education in the United Kingdom and Australia and the relevance of these models as options for New Zealand.
4. Consider the prospects for developing a New Zealand-based training programme for conductors and others working in the field of conductive education.
5. Explore the New Zealand-based Hungarian conductors' needs for inservice training.
6. Examine and evaluate appropriate curriculum development models suitable for training complementary staff in a typical New Zealand conductive education programme team.
7. Investigate NZQA course approval and monitoring arrangements with or without an appropriate Industry Training Organisation (ITO) or National Standards Body (NSB).
8. Where relevant make appropriate recommendations for future actions.

The Researcher and the Researcher's Orientation

The New Zealand Council for Educational Research (NZCER) has been involved in educational research since 1934. From 1980, one of the Council's areas of specialisation has been curriculum research, primarily in the post-compulsory education and training sector. Dr Graham Wagner, a Chief Research Officer at NZCER, with expertise in teacher education, educational psychology, and curriculum research (mainly in the health sciences), was available to manage this study for the Council and the clients.

The advantage of having a general education researcher over someone with a special education background is that the latter will inevitably bring to the study a specific philosophical, theoretical, and practical orientation which could lead to biased judgmental interpretations of what is a new method of service delivery. By having someone from outside special education and the health professions and yet with a broad background in tertiary education, including teacher education, it was felt by the sponsors that a more objective assessment could be given to the feasibility of training for conductive education in a New Zealand context.

Limits of the Study

Contrary to some expectations, especially among some specialists and parents, this study did not set out to evaluate the performance of conductive education alongside traditional therapies.

Conductive education does not have to prove itself as a significant education and health intervention for children and adults with motor disorders (its worldwide success rate confirms its place as a viable alternative in this respect), although it does come up against the charge that it is taking scarce resources from equally valid alternatives without scientific evidence that it is as good as, if not better than, these other alternatives. The matter of comparative performance is being addressed by other researchers (e.g., Dr Kathleen Liberty, University of Canterbury) and is outside the scope of this study, although some mention is made of the research to draw attention to a paucity of empirical data and the importance of having a good knowledge base in any field of human endeavour.

What we do not know, at least with a high degree of certainty, is whether there are any training gaps among those working in New Zealand's adaptive model programmes. Thus, this study makes no excuses for concentrating on training needs and complementary issues affecting the funding and wellbeing of a programme. If there is an attempt to broaden the debate at times, it is because the more controversial issues of the debate are considered to have a direct bearing on training or because differences between contending parties could be resolved through training initiatives.

The perceptions of training needs explored in this study are those of the central characters in the work scene. People outside this scenario sometimes do not have a realistic understanding of real-life needs; and it can therefore be misleading to listen to outsiders' views, no matter how experienced in the education or health sectors they are. One danger in taking this approach is that some people working in programmes will not be introspective enough to determine their own needs with any degree of accuracy. To counter this, the researcher has crosschecked by interviewing a number of people in the same category and then triangulating by asking others from within programmes to identify "others'" training needs. This way the residual or generic needs are considered to be a valid account of what training requires attention.

Basic Assumptions

This research will assist those who wish to work in the field of conductive education in New Zealand. While the research is primarily about conductive education, it will be of some benefit to those involved in early childhood education or compulsory schooling, be they teachers, therapists or parents. A fundamental concept underlying the research design is the belief that this identifiable population has special characteristics and interests which need to be considered in developing training courses for conductors to inform who support their work.

In assessing the feasibility of developing a conductive education training programme for New Zealand, it is recognised that:

1. Conductors, who are presently trained in Hungary, have to deal with a wide range of differences in motor disability requiring a high degree of knowledge and skill, but like all professionals they will benefit from inservice training from time-to-time.
2. Hungarian-trained conductors are at present leaders in their field and as a body are a valuable resource for information and practice on conductive education; consequently they have much to contribute in determining what local complementary support they require to enhance their work in and out of the classroom.
3. Conductive education programmes in New Zealand require a team approach. Yet, apart from the Hungarian conductor, the rest of the members of the team have not been trained in the Pető

method of conductive education.

4. In most programmes, complementary staff are used as essential contributory team members to work with, and alongside, Hungarian conductors, but the former have not been offered formal training to optimise their contribution and augment the work of the team.
5. While parental input is essential in the success of conductive education for children, and parents are required to work with their children in programmes, to date parents appear to have had only informal and ad hoc (on-job) training for this role.
6. Conductive education is a relatively new concept in education in New Zealand. Acceptance by the public at large, and also by education and health policy makers, will require a comprehensive publicity programme aimed at dispelling the apparent mythology surrounding conductive education. The practice of conductive education in this country should be validated by a programme of comparative research based on New Zealand studies.

In general this study adopts the position that conductive education as practised by the Pető Institute is currently undergoing significant changes which include where and how the training of conductors takes place. While changes to the Hungarian political system have been revolutionary, breaking (in part) the monopoly of the Pető Institute on conductive education and the training of conductors, research has thrown light on the mystique surrounding conductive education in the Pető Institute and tentatively pointed to the possibility that the training of conductors can be countenanced outside both the Pető Institute and Hungary (Weber and Rochel, 1992). It appears uneconomic and unreasonable for New Zealanders wanting to train as conductors to have to go to Hungary for this purpose. There are other options.

Structure of the Study

The emphasis in this report is on gathering information that enables the researcher to determine whether training, or more specifically, certain kinds of training, are feasible or not. In line with accepted practice in reporting the results of this kind of research, the investigation is structured along the following lines:

1. Preliminaries (title page, advisory committee, table of contents, etc.).
2. Background and focus of the study.
3. Review of the literature on conductive education and training.
4. Methodology (design and methods).
5. Presentation of results in three sections:
 - (a) Programme characteristics,
 - (b) Perceived training needs, and
 - (c) Training developments.
6. Discussion of results in three sections:
 - (a) Training,
 - (b) Other issues, and
 - (c) Where to next?
7. Conclusions.

8. Recommendations

The final sections (appendices and references) provide further corroborating data to support what has been said in the body of the report.

CONDUCTIVE EDUCATION

A Brief Overview³

Conductive education as we understand it was developed by Professor András Pető (1893-1967) in Budapest in Hungary. Pető considered motor disorders as essentially learning difficulties and set out to demonstrate that people with motor disorders could largely help themselves by learning to create the means to allow the central nervous system to restructure itself. While the motor disorder does not disappear, through the application of an educational process (i.e., conductive education) children and adults with motor disorders learn to control the disorder and so reduce their handicap. Thus the end goal of conductive education is "orthofunction".

The essential elements of conductive education are:

- *The conductor* - a trained and experienced special educator who motivates and trains the child through problem solving to learn new and more appropriate ways of doing things.
- *The group* - the basic unit in conductive education, used by the conductor to motivate the child or adult to work both at keeping up with their peers and to meet his or her own needs.
- *The structured daily programme* and the *task series* - carefully sequenced elements within which the conductor implements an individualised plan to guide and encourage the child or adult towards achievement-oriented targets or personal goals.
- *Facilitation and motivation* - a competitively-based teaching system of providing then withdrawing learning support as independence is achieved for all learners in the presence of others in a work group
- *Rhythmic intention* - a strategy designed to help the child or adult focus on the task and reinforce what has to be done as it is being done.

As an education system (and a way of life) conductive education has been described as "goal centred and goal oriented ... designed to plan total management and which displays a creativity which moves it far beyond the procedural rigidity of physical exercise". The conductive education system is particularly aimed at children. This begins with early intervention from 6 months of age, starting with mother and baby groups, through kindergarten to integrated compulsory schooling. Because the parents are involved at an early stage, the conductive education approach is centred on helping them "to help their children achieve everyday orthofunctional capabilities by intensity and frequency of this creative educational approach".

It is usual for conductive education programmes to group their children as follows: (1) mother

³ Acknowledgement: Some of the ideas in this section are taken from a brochure by the Cerebral Palsy Society entitled "Auckland Centre for Conductive Education".

and baby, (2) kindergarten, and (3) school age. Naturally, these major groupings are split into sub-groupings if the numbers of children and the availability of conductors warrants a broader approach. In some programmes, sessions are provided for children in their teens as well as for adults but this depends very much upon the skill and interest levels of the conductors, given that their main focus is upon early childhood intervention. Obviously the ability to offer sessions for older children and adults anywhere in the world depends upon the availability of teaching expertise and resources, as well as client demand.

RESEARCH ON CONDUCTIVE EDUCATION

Because it is a relatively new educational movement in the Western world, exponents of conductive education have to overcome a credibility barrier. The best way to confirm that conductive education is as good as, if not better than, other methods for working with those with motor disorders is to cite research that supports this contention. Unfortunately much of the literature on conductive education is in Hungarian and has not yet been translated into English. Furthermore, what has been translated is not much help in determining how effective conductive education is and how it works. Most of the recent studies in English appear to be hindered by a limited database of knowledge and systematic accounts of the practices and training of conductors. The Birmingham Foundation for Conductive Education is currently attempting to fill in these gaps and provide a good information base for English-speaking countries.

European Research

It is outside the scope of this study to give a detailed account of the history and development of conductive education which is more than adequately covered elsewhere. There are studies, for example, that provide a social-historical account of conductive education in terms of its wider social context (Cottam and Sutton, 1986); that detail the national and international influence of the Pető Institute since 1965 (Cotton, 1965; Hari and Tillemans, 1984; Cottam and Sutton, 1986; Hari and Akos, 1988); that outline the introduction of conductive education into the United Kingdom (Cotton, 1986); and that document its subsequent developments there (Corbett and Loring, 1989; Lonton and Russell, 1989; Patrick, 1989). To round off these developments in the United Kingdom, Pearson (1991) provides a good account of the history of the Foundation for Conductive Education and the Birmingham Institute of Conductive Education.

There are also English-language studies of the aims, methods, and principles of conductive education written by those outside the Pető Institute, all of which attempt to determine the factors contributing to its success (Sutton, 1984, 1987; Cotton, 1986; Cooper, 1986; Cottam and Sutton, 1986; Jernqvist, 1986; Lonton and Russell, 1989; Pearson, 1991; Presland, 1991; Woodhill, 1991). On the other hand, a careful analysis of articles in English written by those inside the Pető Institute, shows that while not always comprehensible, they at least provide some understanding of the theory underpinning conductive education (Akos, 1975; Hari and Tillemans, 1984; Hari and Akos, 1988).

Lately, it appears that the staff of the Pető Institute were only prepared to divulge a part of their knowledge base to outside reviewers (Bairstow, Cochrane and Hur, 1993), prompting one writer to say that attempting to find out about the operating principles and theory of conductive education could be likened to the "... quest for the proverbial Holy Grail" (Pearson, 1991, p. 38). Bairstow, Cochrane and Hur (1993), in the most thorough attempt to date to identify not only the principles of conductive education but those key ones "...crucial to its effective implementation" (p. 50), had to admit defeat. In their view the difficulty in evaluating conductive education is the clarity and coherence of the original texts in Hungarian. They concluded: "Proponents of conductive education

should meet the challenge of providing a clear and comprehensive account of the system in English, which is the language understood by the majority of the world's scientific community, as a first step in having the system widely accepted" (p. 50).

This notwithstanding, scholars around the world have attempted to check the efficacy of conductive education even if they do not understand the theory underpinning it. The most recent, and by far the most extensive, evaluation of conductive education (Bairstow, Cochrane and Hur (1993)) did not cease simply because the researchers had difficulty identifying the principles underlying the theory of conductive education. A Government imperative kept them on track and consequently their study, although interesting and illuminative in the sense that they documented a lot of what is known about the practice of conductive education, makes some of their key conclusions suspect. The jury is still out on the question of whether conductive education is better than, the same as, or worse than, traditional interventions for children and adults with motor disorders.

Australian Research

The empirical legitimacy of conductive education has been of concern to Australian researchers for some time. Probably because the movement in Australia is therapist-driven, there is widespread concern to determine the efficacy of conductive education outside Hungary and to investigate the validity of the research methods used in assessing the impact of conductive education on children with cerebral palsy.

This concern among therapists to provide scientific evidence about the validity of certain therapies comes, in part, from having to advise parents about the legitimacy of alternative practices including conductive education and, in part, from a concern with outcomes measurement. As French and Nommensen (1992) point out, "... with an increasing drive for quality assurance of treatment principles (Ottenbacher, 1986), resolving the empirical legitimacy debate about conductive education is crucial" (p. 18).

Moving in this direction, French and Nommensen (1992) reviewed the literature on the effectiveness of conductive education and out of 28 potentially relevant studies there were only 6 that tested theories or hypotheses relating to conductive education (i.e., Clarke, 1973; McCormack, 1974; Cottam, McCartney and Cullen, 1985; Heal, 1976; Catanese, Cotter and Connell, 1989; Coleman and King, 1990). Their conclusions after a meta-analysis of the 6 studies were that, due to inconsistencies in programme characteristics and methodological flaws in evaluation designs, it was impossible to provide a definitive answer to the question of efficacy.

It is not surprising to find that there were programme inconsistencies. Each programme outside Hungary appears to adapt conductive education principles to the local curriculum in different ways. Thus, the fragmentation of conductive education programmes can in large part be said to have led to the non-significant results (Cottam and Sutton, 1986). But there are other factors contributing to the non-significant results pertaining to methodological issues, not least of which concerned sampling methods and research design.

French and Nommensen (1992) refer to the misapplication of sampling methods in which, outside Hungary, children for whom conductive education is not thought applicable are included in such programme groups (Bairstow, 1991; Cottam, McCartney and Cullen, 1989; Lonton and Russell, 1989), mainly because no programme co-ordinator/manager would deny access to parents who thought their child might benefit from being in the programme. In addition, research design is

mentioned because the most robust designs require that subjects be randomly assigned to the experimental and control groups and this happened in only one case (Cottam, McCartney and Cullen, 1986), which is not surprising given the ethical issues inherent in assigning children to less than the best known treatment. These two key issues will continue to affect the validity of any efficacy research in liberal-democratic Western democracies.

New Zealand Research

Conductive education is comparatively new to New Zealand, therefore it is hard to find substantive studies of the kind done overseas. One study of note that is shortly to be published is Liberty's (1993) research on the effects of conductive education for children with motor disabilities. What makes this study of significance is that it seeks to overcome the problems inherent in the 6 studies analysed by French and Nommensen (1992) by employing the natural science case-study methodology for determining change in a group of children (Butler, 1986). As is pointed out in Liberty's paper, the natural science method has been found to be appropriate in medical and disability research (Bower and McLellan, 1992) if it is not possible to randomly assign subjects to different treatments. Even so the natural science case-study method must always be regarded as an exploratory technique.

Another feature of the Liberty study is that it deals with changes in children with cerebral palsy and multiple disabilities working with a trained and experienced Hungarian conductor. The gains made by the 6 children in the study prompted the researcher to claim that the results supported the efficacy of the Dunedin conductive education programme and therefore raised the issue of "suitable v. unsuitable" candidates for conductive education programmes. The criteria of "good contact" as outlined in Bairstow, Cochrane and Rusk (1991) would have excluded all 6 children from the programme, yet the children all benefited from conductive education. This seems to suggest to Liberty that previous researchers (Bairstow, Cochrane and Rusk, 1991; Beach, 1988; Reddihough, 1991) have underestimated the range of children with disabilities for whom conductive education might prove of benefit (p. 15).

Overview

What is apparent from this brief account of research in conductive education is the need for coordinated accounts of what has been, and is being done around the world. There is a small but growing body of information - written in both Hungarian and English - on conductive education at the National Library of Conductive Education in Birmingham. Recently, *The Conductor* (Volume V, Nos 3 & 4) produced a useful bibliography of published materials on conductive education which gives good coverage to overseas studies. While not extensive, what has been recorded in English is impressive given the short history of conductive education in English-speaking countries.

CONDUCTIVE EDUCATION AND TRAINING: THE INTERNATIONAL SCENE

Introduction

In the mid to late 1980s a worldwide explosion of interest in conductive education resulted in parents from many nations around the world taking their children to the András Pető Institute in Budapest. Although British parents had been taking their children there since 1964, a BBC documentary called "Standing up for Joe", produced and shown in 1985 (the documentary was shown in New Zealand in 1987), created considerable international interest in conductive education among people from English-speaking countries.

Parents and children were not the only ones who took more than a casual interest in conductive education.⁴ Specialists from the allied health and education professions visited Hungary and took part in conferences, seminars, and workshops run by, or in conjunction with, the András Pető Institute.⁵ However, major political changes in Hungary in 1990 meant that conductors could freely leave the country or set themselves up in private practice "... thereby providing a competitive service to the Pető Institute, and alternative employment for conductors".⁶ Thus, whether it wanted change or not, the Pető Institute's administration, most notably Dr Maria Hari (Former Director of the Pető Institute), has had to face up to changes not only within Hungary but also in the international communities' attitudes to Hungarian hegemony.

The collaborative training arrangement entered into between the Foundation for Conductive Education and the Pető Institute was soured for awhile over a copyright dispute and an evaluation of conductive education carried out by Birmingham University for the Department of Education in the United Kingdom (It is understood that the "copyright" dispute has now been resolved and the two institutions are continuing to work together - see issue 18 of the Conductor). Even so, there have been increasing levels of disquiet expressed by some professionals, together with their partners in training, about the secretiveness of the András Pető Institute and its unwillingness to contemplate the training of conductors outside its own walls.⁷ This has led to movements in some countries

⁴ The first New Zealand families travelled to Hungary in 1988.

⁵ Five New Zealand specialists (3 from the Wilson Home and School in Auckland) attended the 6-week international course at the Pető Institute in 1988. It should be noted too, that a number of health and special education professionals attended the First International Congress on Conductive Education in 1990.

⁶ From notes by Penny Jorgensen on developments of CE in New Zealand.

⁷ See the English-language "Summary and Outlook" section of the research report by Karin Weber and Michael Rochel (1992).

(e.g., Germany, United Kingdom, Australia, and New Zealand) to at least consider other alternatives to sending trainee conductors to Hungary as the only option.

Hungary

Jorgensen (1991) gives a good summary of how conductors are trained at the Pető Institute. Conductors are currently trained with funding from the Ministry of Education. While under training they are not only paid a small salary but contribute to the staffing of the Institute during the 4 years of their practice-based course work.

Up until March 1990 the employment of conductors was under the control of the Pető Institute, but with the liberalisation of the political climate in Hungary it has lost its dominance over the provision of conductive education. The rise of MOIRA and similar privately licensed training establishments in Hungary illustrates that the Pető Institute's monopoly over conductor licensing is now ended. Nevertheless, until recently, the Pető Institute had sole control over the training of conductors.

Jorgensen,⁸ who visited the Pető Institute reported that "The training is currently four years, mostly on site. Students must spend a certain number of hours per day (about three or four) working in programmes at the direction of qualified conductors. Students have to be placed according to the number of places available for student trainees in each group within the Institute. As far as possible student placements allow the following prescribed pattern: first-year students - residential kindergarten; second-year students - school-age groups; third-year students are placed in groups in all different areas of the Pető Institute, and change groups every two months so that they can have experience in the whole curriculum; and fourth-year students are usually placed in groups matching their chosen specialisations - in other words, the areas they expect to work in after graduation. Conductors also study theoretical topics such as neurology, anatomy, physiology, psychology, and conductive education. They also receive training applicable to that of a teacher within the education system in Hungary."⁹ A more detailed account by the Pető Institute of what conductors study is contained in Appendix B.

With the change in economic and political circumstances in Hungary many conductors have left to work in other countries. While the Pető Institute still offers places for foreign families, its resources have been stretched to the limit and its attempts to raise funds internationally have not been very successful. Nevertheless, it continues to offer a 4-year conductor training diploma programme for foreign students.

Since Hungary has opened its doors to private enterprise, there have been a number of private training providers such as MOIRA which now offer training courses to foreign nationals. In particular it should be noted that MOIRA has -

- Established short courses and consultancies for professionals in the United Kingdom.
- Arranged summer schools.
- Run practical courses for foreigners in Budapest.
- Started to produce English-language books on conductive education.

⁸ See Penny Jorgensen's paper mentioned in "References".

⁹ Ibid., p.1.

One of the most exciting new developments in Hungarian conductive education training, with implications for countries like New Zealand, is that the Kecskemet Teacher Training College plans to raise funding to develop modularised training courses which will also be available for international consumption (Plans are stalled at the moment due, it is surmised, to the pending Hungarian elections in May 1994). Mike Lambert, Director of the Birmingham Institute for Conductive Education, indicated recently that his organisation is certainly interested in collaborating in the Kecskemet project although "... clarification of its intentions, plans and the feasibility and relevance of it all need to be more closely examined¹⁰."

United Kingdom

Through the work of Ester Cotton and Anita Lohring, the system of conductive education based upon the Pető Institute was introduced to the United Kingdom in the early 1960s. In England a parent pressure group called RACE (Rapid Action for Conductive Education) staged a mass march on parliament and in the same year the Foundation for Conductive Education was established with Andrew Sutton as its director. The aim of this national charity was "to bring the science and skills of conductive education in its purest form to Britain¹¹." The Foundation, once established, entered into an arrangement with the Pető Institute to train British conductors in Hungary and to collaborate in running a conductive education programme in Birmingham.

It is clear from Andrew Sutton's paper at the International Pető Association's First World Congress in 1990, that the Foundation for Conductive Education has a policy going back to 1985 to transfer conductive education out of Hungary by adapting it to United Kingdom conditions. He takes pains to point out that the essential qualities of conductive education can be transferred without losing something on the way as long as due care and attention are paid to the process of transfer. Sutton outlined six stages in this process making special mention of the evaluation stage and the formation of a National Institute of Conductive Education. It appears that no matter how many trained conductors there are, an institutional infrastructure is required to coordinate their efforts and to build up the necessary in-country knowledge base, something the Foundation is currently working upon.¹²

Working with the Pető Institute, the Foundation for Conductive Education mounted 4-year conductor training courses for selected British teachers in Hungary. In parallel, Hungarian conductors worked in the Birmingham Institute alongside British trainees in a reciprocal arrangement. This year a 4-year study, commissioned by the Department of Education and undertaken by Birmingham University reported on the success of the collaborative effort between the Birmingham Institute and the Pető Institute. To many in the field the report was a disappointment because it raised a number of serious doubts about the efficacy of conductive

¹⁰ A report by Mike Lambert on his visit to Budapest and Berlin, 1-12 February 1993, p.2.

¹¹ Mentioned in Farkas, et al (1993) *Questions about Conductive Education with answers put together by the Hungarian-trained Conductors currently working in New Zealand*.

¹² See Andrew Sutton, "Conductive Education in the United Kingdom: Chaos and Social Policy". A paper presented at The International Pető Association's First World Congress and included in *Conference Proceedings: November 29 - December 1, 1990*, pp. 39-41.

education when its own methodological shortcomings contributed to these findings.

Japan

It is reported that Japan was the first foreign country to send students to take part in the four year training course at the Pető Institute. After Dr. Murai Musano, the founder of the Warashibe Institute for Children, visited the Pető Institute in 1976, and saw that "the method cannot be bought and that practice and theory were inseparable", he arranged for 10 Japanese parents with their children and 10 students to follow him in 1978. Since then, it is claimed, one student a year has been sent to the Pető institute for training and the staff of the Institute have visited Japan to see the work in Hokkaido and Osaka.¹³

Seemingly providing contradictory evidence, Dr Musano, reported that since 1978, "19 staff members have been given the opportunity to learn at the Pető Institute". Of these 19, only two stayed long enough to be awarded a conductor's licence, six were still engaged in conductive education, while the remainder had taken time out to bring up their own children. There is no mention of Japanese children being sent to the Pető Institute after March 1979.¹⁴

Israel

Tsad Kadimah (Step Forward), set up by professionals and parents, has sent trainee conductors and children to Hungary over a considerable period of time. Udi Lion reported at the First World Congress on Conductive Education that it is his belief that students must "immerse themselves in the culture of conductive education" so that there can be a full transfer of effects into Israel.¹⁵ Accordingly there is a close working relationship between the Institute and Tsad-Kadima with the Pető Institute staff helping in the selection and monitoring of children with motor disorders including those with severe disabilities. There is collaboration each year in the running of summer and spring camps staffed by trainee conductors from Israel and conductors from the Pető Institute.¹⁶

Europe

During the last few years a succession of professionals and parents from many European countries including Austria, Holland, Belgium, France, Germany, Greece, and Cyprus have visited the Pető Institute for assessments and short courses. Recent research on conductive education in Germany, and experience in Austria, would suggest that conductors can be trained outside Hungary. The Pető Institute is not happy about this development, believing that the integration of Pető-style training with traditional types of therapy is restricting the ability of the motor-disabled to achieve "self-

¹³ Julia Hovath, Pető Institute, reporting to the First World Congress (1990) of The International Pető Association. *Conference Proceedings*, p.9.

¹⁴ See Masanao Murai's "Conductive Education in Japan". A paper presented at The International Pető Association's First World Congress and recorded in the *Conference Proceedings: November 29 - December 1 1990*, pp. 28-30.

¹⁵ Jorgensen, op.cit., p.11.

¹⁶ Horvath, op.cit., p.9.

sufficiency": "Nothing has inspired them to learn self-sufficiency since they are given all the advanced instruments and participate, in education, in wheelchairs".¹⁷

Hong Kong

Although interest in conductive education started early in Hong Kong, it was a visit by Ester Cotton in 1984 that initiated a working group on conductive education to co-ordinate and promote the knowledge and application of conductive education in Hong Kong. In 1989, a Hong Kong conductive education project was set up to deal with the increasing demand for education, publication, co-ordination, and liaison of those undertaking conductor education. Since then therapists, teachers, and nurses have attended short courses in Hungary each year, and work is continuing on the compilation of information and resource materials in conductive education. There is at present a 115-hour certificate course on conductive education being offered at the University of Hong Kong.

Australia

Developments in conductive education in Australia are similar, in some respects, to what is happening in New Zealand although there are wide differences among the states in the way conductive education is being promoted.; yet in research Australia definitely is further ahead. In Victoria, where we have closer ties, the developments in conductive education are specialist-driven while in New Zealand they are parent-driven. Other states, principally New South Wales, have Hungarian conductors and could be said to be parent-driven like New Zealand. Nevertheless, a key difference in this respect is that in New Zealand there is a unified approach by parents across the country to coordinate the work of the programmes, while in Australia it varies considerably between states as to whether specialists or parents are the key activators. Any coordination is at the national level.

As far as training goes, the National Association for Conductive Education in Victoria (NACE Victoria) has a clear plan for training those specialists on whom it relies to run state-wide programmes based on conductive education principles. The Association has developed a plan for 3 levels of training: short courses, such as workshops and seminars on specific topics, a postgraduate certificate course at the University of Melbourne, and in the long-term it hopes to introduce a 4-year undergraduate course after 1996.

The role that the Pető Institute might play in training conductors for Australia was, and still is, unclear, although dialogue with Hungary has been under way for some time now. From recent discussions with NACE (Victoria) it appears that Australia may have to set up its own conductor training system with or without assistance from the Pető Institute.¹⁸

¹⁷ Ibid., p.10.

¹⁸ See Graham Wagner's report on the results of his October 1993 visit to Melbourne listed in "References".

New Zealand

In many respects New Zealand's interest in conductive education has paralleled that of Australia.¹⁹ Interest by specialists in the early 1980s (led through the Cerebral Palsy Society) to a showing in 1986 of the BBC documentary "Standing Up for Joe". This was followed by a visit to the Birmingham Institute by a New Zealand teacher in 1987. Inspired by the publicity following the pilgrimage of a child to the Pető Institute, and the promotional skills of Penny Jorgensen, PACE was established at a public meeting at the Auckland College of Education in September 1987.²⁰ Since 1988 a number of New Zealand parents have taken their children to the Pető Institute, and professionals (i.e., specialists) have attended short courses and made regular visits to find out more about this method of special education.

Resulting from parental interest in conductive education, Dr Hari (then Director) and 4 senior staff from the Pető Institute visited New Zealand in 1991. This was also the year that programmes started up in Dunedin, Waikato, and Wellington, followed in 1992 by programmes in Auckland (Cerebral Palsy Society) and Christchurch. In early 1993 another Auckland programme was set up in Henderson, bringing the total of programmes with Hungarian-trained conductors around the country to 6. There are, in all, 11 Hungarian-trained conductors living and working in New Zealand, which at last count was one more than for the whole of Australia.²¹

Realising the cost of travel to Hungary, PACE started negotiations with Dr Hari in 1990 about the training of conductors for New Zealand programmes when the president of PACE, Penny Jorgensen, visited Hungary in March. The cost of training was given as \$US300,000 per trainee, plus other costs such as travel, language costs, and so on, all to be provided by New Zealand funders.²² These costs were plainly out of New Zealand's reach at the time, so the training matter was brought up again during Dr Hari's visit to New Zealand in 1991 without avail, although a response was promised in due course.²³

No response was received that year, but it was clear from a 1992 Pető Institute announcement of a 2-year postgraduate course for training conductors in Hungary that anything the Pető Institute was prepared to do would not make their courses accessible to New Zealand specialists. This prompted the president of PACE to speculate that the employment of conductors in New Zealand to "help train professionals and parents ... may represent a satisfactory solution in the long term".²⁴ Two features of this approach giving cause for concern were the effects a "brain drain" would have

¹⁹ For more information on the development of conductive education in New Zealand see Penny Jorgensen's paper entitled "New Zealand Perspectives on Conductive Education" listed in "References" section at the end of this study.

²⁰ Ibid.

²¹ A Hungarian-trained English conductor worked for a while in the Otago programme but left earlier in 1993 and at present has nothing officially to do with the Otago programme.

²² Report by the president, Penny Jorgensen, in *PACE Newsletter*, October 1990, p.4.

²³ Notes from Penny Jorgensen on the development of conductive education in New Zealand.

²⁴ *PACE Newsletter*, October 1990, p.5.

upon the Pető Institute and "... the possibility of losing the essence of C.E. forever. This is a dilemma I think for us all - not just in N.Z. but in other countries too."²⁵

Jorgensen (1991) asked 2 questions concerning the kind of training for New Zealand conductors:

- (1) "Do we want an independent system of conductive education for New Zealand as it is currently in Hungary?"

or

- (2) "Do we want an integrated system with other health and education services?"

She argued, "The way in which we intend conductive education to be provided in New Zealand will impact on the way we train our conductors".²⁶ In other words, do we go for Hungarian-trained conductors in spite of the cost or do we do the training in-country using local health and education specialists and services.

These questions highlight the dilemma New Zealand supporters of conductive education are faced with. Jorgensen argued that we cannot afford to send our trainee conductors to the Pető Institute nor can we afford not to start training in this country. There is a strong possibility that the "essence of conductive education" (culture bound as it is) would be lost to us and we would get a so called "watered-down" version. In spite of this possibility, the experience of the Foundation for Conductive Education in the Birmingham, UK, is that there has to be another way, given the difficulty of working with the Pető Institute and local demands for more conductors.

Foreshadowing the present study, Jorgensen (1991) saw 3 main options for training in New Zealand:

1. Short-term: upgrading the skills of specialists, parents, and community leaders in the philosophy and practices of conductive education;
2. Medium-term: postgraduate training in conductive theory and practice for specialists (therapists and special education teachers) and parents "who may be interested" (p. 8);
3. Long-term: full conductor training for New Zealand students.²⁷

Overview

In summary, trends overseas backed up by current thinking in New Zealand indicate that there are several possibilities for training people associated with, and working in, New Zealand conductive education programmes. As a result both of previous investigations into training needs and the present study, it would appear that the training required may range from short courses dealing with specific staff development needs in individual programmes, through postgraduate courses for professionals in special education and therapy, to full conductor training. This study aimed to discover what kinds of training are required and whether they are separately and collectively feasible.

²⁵ Ibid., p.5.

²⁶ Ibid., p.3.

²⁷ Ibid, p.8.

METHODOLOGY

Research Sample

Sampling in this study applied to those units and people providing information so that the objectives of the study (see p.7) could be realised. For the reasons outlined by Easterby-Smith, Thorpe and Lowe (1991)²⁸ a phenomenological approach, with its focus on meanings and explanations of what is happening in a holistic fashion, was used as a theoretical framework for gathering research data. As the programmes are the principal unit of study, those most likely to need training to function within, or in conjunction with, a programme are the ones who make up the target group, or sample, for this study.

The Units of Study

As a way of classifying programmes to ascertain who should be included in this study the following typology was devised:

Model A	Model B	Model C
PURE MODEL	ADAPTIVE MODEL	ALTERNATIVE MODEL
András Pető Institute, Hungary	Based on pure model, with local contexts, varied only as required	Based on pure CE principles but dominated by local needs and conditions
Institutional approach with teams of conductors - education and training role	Conductor(s) assisted by support staff - no conductor education and training role	Multi-disciplinary team with occasional input from a conductor to set up groups or advise team
Unique	Incl. MOIRA	Also in Hungary

Figure 1: *Models for Defining Approaches to Conductive Education*²⁹

Both Tony Cantanese and Claire Cotter (NACE, Australia) found the 3-model typology useful and after some discussion agreed that the model operating in Victoria, Australia, was the alternative

²⁸ See Easterby-Smith *et al.*, "Management Research". London: Sage Publications (1991).

²⁹ The researcher would like to thank Rowena Somogyváry and the project advisory committee for checking the validity of these models.

"holistic" one.³⁰ As noted above this is Model C, a model based upon the principles of conductive education. What distinguishes it from the adaptive model (B) is that there is no full-time conductor in any one of the programmes and the programmes are run by local health and/or education professionals.

The degree of conductor involvement differs in the 3 models. In the alternative model (C) the conductor is not present most of the time but a conductor has had some input into the way the programme operates (i.e., employing the principles of conductive education in a holistic education fashion). The conductor's influence may be in the nature of advice and assistance with training among a number of geographically distant programmes, as it is in Victoria, Australia. On the other hand the conductor's influence may come from establishment visits, regular contact with those in adaptive programmes, and attendance at international conferences on conductive education.

The adaptive model (B) recognises that there is at least one full-time trained conductor working in the programme who has a leadership role, although he or she may be assisted by others including teachers, teachers' aides, and/or other specialists. This model is alternative because it uses the professional services of a conductor, or conductors, to implement a Hungarian system of education and training, combined with local support services from New Zealand culture. The result is a Pető-style of conductive education adapted, where necessary, to fit into the local scene. Adaptive-model conductors, as defined here, do not usually work in an institutional setting, although they may work in small teams with other conductors. They are essentially alone, or with one or two others, and therefore have more responsibility in decision making than they would have in the Pető Institute.

The pure model (A) of conductive education is the education and training system offered by the András Pető Institute in Budapest. It is culture laden and institutional by nature. Except for very young children, most of the courses are residential at least throughout the week. Conductors work in groups under the guidance of senior conductors, although the term "mentors" would better describe these experienced senior instructors. Trainee conductors are also part of the group. Much of what goes on in the Institute, especially in the field of research, is apparently documented in Hungarian. There is little that has been translated into English although the Foundation in Birmingham is endeavouring to fill in this gap in our knowledge. The pure model is not an ideal model for many open societies such as New Zealand, but it has a powerful influence on conductors who try to replicate its structures and practices outside Hungary as near as they can to the real thing.

Variations on the Three Models

It has already been pointed out by the Advisory Committee that the typology does not appear to allow for other models between, for example, the pure and the adaptive models. It should be clear from above, that there is a continuum between the pure and alternative models, and it is conceivable that there are different structures in Hungary (and other countries) that are variations of these generic models. One could argue that there should also be a Birmingham model in the typology, as the Birmingham Institute in the United Kingdom employs groups of Hungarian-trained

³⁰ See Graham Wagner's *Final Report on a Visit to Melbourne, Australia: (1) To discuss post-graduate and related training matters with NACE officials and others involved in conductive education, and (2) To follow up research on information technologies in education and society*. Wellington: NZCER (1993).

conductors to replicate the pure model with a high degree of harmonisation. Nevertheless, models are only heuristic devices for making sense out of complex issues or structures, and as defined in this study the adaptive model can still be used to describe the Birmingham situation, which by any account is an adaptation of the pure model to local conditions.

If there is no full-time Hungarian-trained conductor working or guiding a programme, yet there is an attempt to run the programme as closely as possible along conductive education lines, the model from the above typology that best suits is the alternative model. Carlson School in Auckland is categorised as an alternative programme even though it has only just recently lost a Hungarian-trained conductor and has gained an English conductor/teacher. In the first instance, the recently-departed Hungarian conductor was required to work with, and under, New Zealand staff and did not "conduct" in a programme in the way that she would have done at the Pető Institute or in a adaptive model programme. In the second instance, the English-trained teacher, who did not train in Hungary, is not regarded as a conductor,³¹ while an Englishwoman who worked for a time in the Dunedin programme but did her conductive education training in Hungary is still regarded as a conductor. This is no reflection upon the impressive work of Carlson School and its staff but rather an issue of definition. At the moment the Pető Institute still sets the standard and determines who is a conductor and who is not.

New Zealand Programmes

In New Zealand at this time there are 9 programmes that either run conductive education group sessions or group sessions based on the principles of conductive education. Of these 9, 6 are of the adaptive model variety and 3 are of the alternative model type.

Adaptive Model Programmes

- Auckland Centre for Conductive Education, Cerebral Palsy Society
- Auckland Conductive Education Foundation (Waitakere Division)
- Conductive Education Waikato Trust
- Conductive Education Wellington Inc.
- Conductive Education Initiative, Canterbury
- Otago Conductive Education Trust

Alternative Model Programmes

- Wilson Home School - Holistic Education Programme - North Shore, Auckland
- Carlson School for Cerebral Palsy, Auckland
- Child Potential Unit, Rotorua

One of the adaptive model programmes (Otago) is presently recruiting a conductor but continues

³¹ It is a contentious matter with some people that a distinction should be made between the training offered by the Danish expatriate, Esther Cotton, in the United Kingdom, and the training offered at the Pető Institute. In our view the Pető Institute currently sets the standard. In the United Kingdom both the Birmingham Institute for Conductive Education and the Spastic Society (at this stage) only recognise conductor qualifications obtained from the Pető Institute.

to function under the direction of an experienced early childhood teacher, albeit with a reduced offering of group sessions.³² Another programme, Wellington, changed conductors recently when its principal conductor (Anna Farkas) returned to Hungary.

As mentioned above, one of the alternative model programmes (Carlson School) has recently replaced its Hungarian conductor with an English-trained conductor/teacher but still continues to run group sessions along conductive education lines. Other alternative programmes indicated that they would like to employ conductors but raising the necessary extra funding, problems with salary relativities, and philosophical differences have yet to be sorted out before this could happen.

The Interview Sample

After a visit to 2 programmes, some internal debate, and advice from the group, the following categories of people were identified for in-depth interviews:

1. Co-ordinators/managers
2. Chairpersons
3. Conductors (Pető-trained)
4. Trust/Society board members
5. Specialists
6. Parents/caregivers
7. "Other" staff working in programmes
8. Key international commentators on conductive education training and research.

Rationale for Sample Selection

Co-ordinators/managers: They are the people responsible for administering and, in most cases, managing the programme. In doing this job they liaise with parents and the community, manage staff, including conductors, and in general ensure that the programme runs smoothly on a day-by-day basis. Without a co-ordinator/manager, programmes appear to experience more than their fair share of interpersonal conflicts and professional difficulties. The programme co-ordinator/manager appears as a key person in the efficient running and financial viability of any programme. Because of their central position, they are deemed to have training needs, especially in relation to conductive education which is a relatively new educational system in New Zealand.

Chairpersons: The chairperson of a trust, foundation or society is another key person. Divorced from the day-to-day running of the programme, these people are nevertheless responsible for initiating policy and assisting in raising money for the employment of programme staff. In some programmes chairpersons have a more hands-on role than in other programmes, but in general their vision and the way they link with the community makes the chairperson an important contributor to the financial health of the programme. Again, because of their central role and the fact that they are often enthusiastic supporters of conductive education but untrained for the position they currently hold, chairpersons are also deemed to have training needs.

³² Information has been received from the Otago programme (facsimile from Debbie Young, dated 24 December 1993) that a Hungarian conductor has been recruited and will start work on 30 January 1994.

Conductors: Conductors, as so defined, are already trained in their craft before they arrive in New Zealand. After a 4-year training course a certificated conductor should be able to practise anywhere outside the Petö Institute and indeed they do. Nevertheless, a recently graduated conductor does not have the experience of a senior conductor nor do all conductors new to New Zealand have a sufficient understanding of this country's culture, and in most cases, the English language to enable those working with them to feel secure in their ability to contribute to their maximum potential. In addition, there is a strongly held belief nowadays among all professionals that inservice training is an essential feature of any job if one wants to keep up to date. Therefore it is not unreasonable to assume that conductors themselves may require some inservice training.

Board Members: Members of a trust, federation, or society running a programme are usually a mix of professionals and parents. In some groups parents have taken a dominant role in the affairs of the trust, foundation or society and in others it is the professionals who have led, supported by the parents. Where parents have a dominant role it is often because their interest in conductive education stems from having a child with a motor disability and they wish to give their child, and others like theirs, the best services that they can find. This understandable dedication and commitment does not mean that they are necessarily well equipped to provide the leadership skills required to finance and administer a programme with a budget of \$190,000 or more, involving a disparate mix of specialist and volunteer contributors. Even a full-time professional, skilled in financial and/or personnel management, is often attracted to conductive education without a clear idea of what it all means. Here too, there are likely to be some training needs for both professionals and volunteers.

Specialists: As defined in this study, specialists range from doctors through traditional therapists and educators to professional managers with some input into the financing of a programme. All are judged to have trained in their various disciplines and might be considered not to need training further. However, when it is also considered that conductive education is relatively new to New Zealand, and that there are already clear demarcation lines being drawn between the work of traditional therapists and conductors (in some regions more than others), one can only assume that professional sensitivities may be getting in the way of what ought to be a close collaboration, if the best interests of the child and parents are to be recognised. Usually, professional suspicions arise from not fully understanding the contribution that a new intervention can make to parental choice in the provision of services for those with motor disabilities. Rather than suggest imposing training in conductive education on specialists, it would be more relevant to consider such professionals as requiring a contribution to their continuing education about alternative interventions in the provision of health and education services.

Parents and caregivers: These people are an essential part of the group in any programme session. Especially in the early-age ranges, parents and caregivers under the direction of a conductor do much of the hands-on work required in any session. One could say that they are being trained on-the-job by the conductors so that the training can continue at home. Nevertheless, parents and caregivers appear fully occupied with specific activities in programme group work. In most programmes, but not all, there appears to be no off-the-job training, for example, to explain in a general way what conductive education is trying to do for children. The language barrier has obviously been a contributing factor to a high degree of ignorance about conductive education among parents and caregivers. In New Zealand, with its high levels of educational participation,

there is widespread interest among parents and caregivers in why conductors do what they do, and how they will benefit the children. There is already a perceived information gap here that needs investigation.

"Other" staff: These are mainly teachers' aides or volunteer workers who have some kind of input into a programmes group activities. Often these people spend a great deal of time moving equipment, cleaning up, and caring for the physical needs of the children in the groups. In addition, they also fill in for parents and caregivers and therefore are expected to render hands-on assistance with the children. On rare occasions they may be the only ones available to keep the programme running if a conductor is on sick leave. They are required to deal with children with disabilities as well as with parents and caregivers. Mostly untrained before they come to work in the programme, they require not only training from conductors but also training for further work in dealing with children with disabilities.

Commentators: Key international commentators views on training for conductive education, outside the New Zealand programmes, centred in this study on the work and views of Claire Cotter (Cerebral Palsy Society of Victoria, Australia) and Mike Lambert (Birmingham Institute of Conductive Education, United Kingdom). Both have had considerable experience in setting up and running conductive education programmes in their respective countries and were well versed in issues relating to the education and training of conductors or leaders. They both visited New Zealand in May 1993 and were available for interviews by the researcher. Later, there was an opportunity to find out in detail more about postgraduate training in conductive education when the researcher visited Claire Cotter at the Knox Centre in Melbourne in early October 1993. These commentators' views have influenced the structure and content of this study.

The Interview Schedules

As the main focus of this study was to document what people think about training for conductive education in New Zealand the best way of finding this out was to ask the people most concerned what they perceive to be their own (and others) training needs.³³ The choice of data-gathering methods was narrowed down to interviews and/or mail questionnaires. During the piloting phase it became apparent that questionnaires were an inferior method for gathering data, not only because of the usual disadvantages associated with such written recognised instrument but because there was a need to explore, within a number of key groups, people's experiences, aspirations, and feelings in a highly charged climate of professional or personal sentiments. This necessitated an in-depth questioning approach with the flexibility to depart from a set of structured interview questions if the need arose.

Seven separate semi-structured interview schedules were deemed the most appropriate research instruments for gathering data from the target groups within each programme.³⁴ Each schedule was different in that introductory questioning was aimed at eliciting general information pertaining

³³ Delbert C. Miller (1991) *Handbook of Research Design and Social Measurement*. London: Sage Publications, p.119.

³⁴ Copies of only 2 of the interview schedules used in this study are included in Appendix A for reasons of space.

to the person being interviewed and the role they had in the programme, before focusing on their training needs.

In the schedules for the co-ordinator/manager, chairperson, and trust members there were specific questions about the funding of the trust, the recruitment of staff, and other personnel matters relating to the administration and management of the programme. Without information on these matters it was very hard, if not impossible, to make valid and achievable recommendations about filling any identified education and training gaps. Because of the confidential nature of the information provided in this part of the study, only a general overview will be provided in the "Results" section.

The schedules covering conductors, specialists, parents/caregivers, and other staff were more role specific. All schedules included questions of "perceived training needs" not only in the person being interviewed but those with whom they came in contact. In group interviews, an attempt was made by the recorder to see if there was a difference of opinion on any question and then to qualify, or quantify, the collective responses.

Interviewing Procedures

The interview schedules were piloted at the Wellington programme. Minor modifications were made and then the schedules were used in a standard form throughout the country. In all but 2 cases the schedules were administered by the researcher in a private setting during a visit to a programme.³⁵ Prior to each visit the researcher sent out an explanatory letter with an introductory notice from Ross Brereton of NZCCS explaining the purpose of the visit and introducing the researcher. In addition, a blank timetable outline was included for recording the visits of the researcher.

Most interviews took place in or near the programmes, but for some the interviewer went to the home or office of the interviewee if this was more convenient to the latter. In general the interviews were handled as would be expected by an experienced researcher and interviewer. The format of the semi-structured interview schedule allowed the researcher to maintain objectivity by keeping to those points considered relevant to the study (objectivity), but at the same time when the occasion arose allowed the exploration of tangential issues which might have had a bearing on training needs.

At no time was there any evidence that feminist views on interviewing, including disengagement (Oakley, 1984), establishing a rapport (Finch, 1984), and gender interactions (Fishman, 1990), were factors affecting the response patterns of those being interviewed, the majority of whom were female. The fact that parents, who were sometimes emotionally fragile, were interviewed in a group meant that they always had the support of other caregivers or parents. At times some of the questions (e.g., about familiarity with alternative approaches to therapy) were difficult to answer objectively, but in no case did the interview break down or a question remain unanswered; and special care was taken to ensure that those being interviewed did not feel threatened or vulnerable.

At the start of each interview, interviewees were asked if they understood what the research was about. If they responded to the contrary, a brief explanation was given drawing attention to the NZCCS letter of introduction. Rather than run a formal question-and-answer session, the

³⁵ On 2 occasions the interview schedules were left with the interviewee to complete when a tight timetable intervened.

researcher's method was conversation discourse with questions being introduced when and where appropriate. All responses were written down on the schedule by the researcher and later entered in a word processor for coding and analysis.

Data Analysis

Much of the information for the literature review was collected from searches of on-line data bases and from information and articles collected during the study. The raw data on the programmes, outlined in the tables below, came from the programme administrators (usually the co-ordinator/managers). This information was annotated with explanatory notes for easy reference to give a concise overview and to form the basis for comparison among New Zealand programmes and their counterparts in Victoria, Australia. In addition, and where appropriate, supplementary interview data were collected from overseas visitors, an expatriate New Zealander living in Hungary at the time, and State servants in New Zealand who were privy to information on the funding and administration of education and health services for people with disabilities.

By far the largest body of data collected for this study came through interviews with 145 people who were working within or alongside one of the 9 New Zealand programmes. The information supplied by all interviewees for each category of response was collated under question headings then interpreted and summarised for reporting in the "Results" section. The researcher was assisted in the analysis by an experienced research assistant.

After the data had been incorporated in a draft report, the Advisory Committee received it for comment before the final version was released to the sponsors in early April 1994.

RESULTS

Overview

This section reports on the visits to each programme and on the interviews conducted mainly in the programmes. Data gathering also extended outside the programmes where specific information was sought by the researcher on research, funding sources, and other similar matters that have a bearing upon training needs. The section is divided into three parts:

- Part A: The Programmes
- Part B: The Interviews
- Part C: Training-related Information from Other Sources

Nine programmes (6 adaptive and 3 alternate) were visited and 145 people were interviewed, divided by category as follows:

- 7 Co-ordinator/managers
- 8 Chairpersons
- 9 Conductors
- 35 Trust/foundation/society committee members
- 29 Specialists
- 39 Parents
- 6 Caregivers
- 12 "Other" Staff

Note: Not all programmes had co-ordinator/managers, and one chairperson did not attend the interview through a misunderstanding over the venue. Also, Andor Cseh (Wellington) has not been included as he arrived in the country after the researcher had visited the programme. Finally, there was no conductor in residence at the Otago programme when the researcher visited in early December 1993.

PART A. THE PROGRAMMES

Characteristics of Programmes

As mentioned in the introduction, the programmes operating in New Zealand can be classified as adaptive or alternative models: adaptive models contain full-time conductors; alternative models do not have Hungarian conductors, although they may have (or have had) intermittent conductor input. Nevertheless, such programmes are operated using the principles of conductive education.

Adaptive programmes are not as uniform as they might at first appear. The staffs in each programme are working for different administrations, and outside each programme the conductors'

practices are not unified in any way; apart, that is, from their common training at the Pető Institute. Conductors use different assessment methods and their work groups are different from one another. Working conditions are different among programmes. While some programmes operate as playgroups, others function as an early childhood education centres (private providers still have to be licensed to operate). Still, there are many similarities at the professional level leading to attempts to coordinate structures and functions at the national level in adaptive programmes through the auspices of the New Zealand Foundation for Conductive Education. It appears that this national coordinating role could be extended to alternative programmes if they were to become fully involved in the work of the Foundation.

All programmes, whether adaptive or alternative, are bound together by their interest in conductive education. They have all been influenced, directly or indirectly, by the Pető Institute and Hungarian conductors, and all have, until recently at least, taken part in National Working Party on Conductive Education meetings and discussions. For this reason the alternative programmes, as described below, have a right to be included here, although they are not the main focus for this study.

All programmes in the following tables have been categorised using recognisable criteria such as:

- Location of group
- Name of Group
- Numbers of children and age ranges
- Catchment area for referrals
- General diagnosis of motor disorder and range in each group
- Duration of each group session
- Staff time in hours per week - both in the group and on associated work outside group sessions.

The reader will notice the following tables make it possible to determine the essential differences between programmes such as the ratio of other staff to conductors, range of group work, number of groups, sessions offered and their duration, and so on. As the information provided by the programmes pertains to conditions existing in late 1993 it should be recognised that the details may have changed for some programmes in 1994.

Adaptive Model Programmes

Auckland Centre for Conductive Education - Ponsonby - Cerebral Palsy Society Auckland

LOCATION	GROUP NAME	NUMBERS OF CHILDREN	CATCHMENT AREA	DIAGNOSIS (GENERAL)	DURATION OF ACTUAL PROGRAMME	STAFFING & HRS PW	
						In Group	Out Group
Auckland Centre for Conductive Education	Beginners - mother and baby	5 6-18 mths	Auckland Metropolitan Region	Severe CP	5 x 2-hr sessions per week	C1 10.0 TA1 10.0	20.0 25.0
	Advanced - mother and baby	6 2.5-5 yrs		Moderate to mixed CP	5 x 3-hr sessions per week	C3 15.0 TA3 15.0	15.0 15.0
	Kindy	6 2.5-6 yrs		Severe motor disability	5 x 5-hr sessions for 3 wks per month	C2 25.0 TA2 25.0	5.0 10.0
	School	6 6-7.5 yrs		Severe CP	5 x 5-hr sessions for 1 wk per month	C2 25.0 TA2 25.0	5.0 10.0
	Walking	4 3-4 yrs		Mild CP	2 x 1.5-hr sessions per week	C3 3.0 TA1 3.0 TA3 3.0	
	Swimming	8 2.5-7 yrs		Mild to severe CP	1 x 1-hr session per week	C1 1.0 C2 1.0 C3 1.0 TA1 1.0 TA2 1.0 TA3 1.0	

Key: C - Conductor
TA - Teacher's Aide

Auckland Conductive Education Foundation (Waitakere Division) - Henderson, Auckland

LOCATION	GROUP NAME	NUMBERS OF CHILDREN	CATCHMENT AREA	DIAGNOSIS (GENERAL)	DURATION OF ACTUAL PROGRAMME	STAFFING & HRS PW	
						In Group	Out Group
Auckland Conductive Education Foundation (Waitakere Division)	Beginners - mother and baby	7 1-3 yrs	West Auckland	Moderate to severe disability	4 x 2 hr sessions (Plus swimming of 1.5 hrs in summer)	C1 8.0 C2 8.0	6.0 6.0
	Advanced - mother and baby	6 15mths-3yrs		Mild to moderate motor disorders	2 x 3 hr sessions (Plus swimming)	C1 6.0 C2 6.0	3.0 3.0
	Kindy	3 4-6 yrs		Moderate CP with visual /hearing/ and oral impairment	2 x 3 hr	C1 6.0 C2 6.0	3.0 3.0
	School	2 7-8 yrs		Moderate CP	1 x 3 hr session	C1 6.0 C2 6.0	
	Adult	5 24-45 yrs		MS	1 x 2 hr	C1 6.0	3.0

Key: C - Conductor

Conductive Education Waikato Trust - Hamilton

LOCATION	GROUP NAME	NUMBERS OF CHILDREN	CATCHMENT AREA	DIAGNOSIS (GENERAL)	DURATION OF ACTUAL PROGRAMME	STAFFING & HRS PW	
						In Group	Out Group
Conductive Education Waikato Trust	Parents and baby	6 15-24 mths	Midland Regional Health Authority	Severe disability	2 x 2.5-hr sessions per week	C1 2.5 C2 5.0 T1 2.5	0.5 0.5
	Bindy	8 2-3.5 yrs		Moderate to severe disability	3 x 2.5-hr sessions per week	C1 5.0 C2 7.5 T1 2.5 OT1 5.0 OT2 2.5	0.5 0.5 1.0
	Kindy 1	5 4-6 yrs		Moderate to severe disability	2 x 3-hr and 1 x 4-hr sessions per week	C2 10.0 T2 4.0 T3 6.0 TA1 10.0 OT2 7.0	1.0 1.0
	Kindy 2	8 4.5-7 yrs		Severely disabled	3 x 2.5-hr and 2 x 3.5-hr sessions per week	C1 14.5 T1 11.0 TA1 3.5 OT1 11.0 OT2 3.5	1.0 1.0

Key: C - Conductor
T - Teacher
OT - Occupational Therapist
TA - Teacher's Aide

Conductive Education Wellington Inc.*

LOCATION	GROUP NAME	NUMBERS OF CHILDREN	CATCHMENT AREA	DIAGNOSIS (GENERAL)	DURATION OF ACTUAL PROGRAMME	STAFFING & HRS PW	
						In Group	Out Group
Conductive Education Wellington Inc.	Bindy group	8 2.5-3.5 yrs	Wellington Region	Mixed CP	5 x 3-hr sessions	C1 15.0 TA1 15.0	
	Spina bifida	3 16mth-2 yrs		Spina bifida	1 x 2-hr sessions	C1 2.0	
	1 Baby	1 7 mths		Mixed CP	2 x 1.5-hr sessions	C1 3.0	
	Kindy	5 4.5-7 yrs		Mixed CP	2 x 2.5-hr session	C1 5.0 TA1 5.0	
	School 1	3 7-11 yrs		Mixed CP	1 x 1.5-hr session	C1 1.5	
	School 2	3 5-13 yrs		Mixed CP	1 x 2-hr session	C1 2.0	

Key: C - Conductor
TA - Teachers' Aide

* The Wellington programme changed conductors in September 1993 when Anna Farkas went on study leave to Hungary. When she returned it was expected that the relieving Hungarian conductor Andor Cseh would stay on and Wellington would then increase its conductor establishment to 2. However, Anna Farkas came back briefly in the New Year, resigned and returned to Hungary. In addition to these changes, Wellington has recruited a programme manager, Rowena Somogyváry, who started work on 25 January 1994.

Canterbury Conductive Education Initiative

LOCATION	GROUP NAME	NUMBERS OF CHILDREN	CATCHMENT AREA	DIAGNOSIS (GENERAL)	DURATION OF ACTUAL PROGRAMME	STAFFING & HRS PW	
						In Group	Out Group
Canterbury Conductive Education Initiative	Babies' group	6 1-2.5 yrs	Canterbury Region	Very mixed CP	1 x 3.5-hr session	C1 3.5 T1 3.5	2.5 2.5
	Kindergarten group 1	4 2.5-6 yrs		Very disabled CP	4 x 3.5-hr sessions	C1 14.0 T1 14.0	3.5 3.5
	Kindergarten group 2	5 4-10 yrs		Moderate CP	4 x 3.5-hr sessions	C1 14.0 T1 14.0	2.5 2.5

Key: C - Conductor
T - Teacher's Aide

Otago Conductive Education Trust*

LOCATION	GROUP NAME	NUMBERS OF CHILDREN	CATCHMENT AREA	DIAGNOSIS (GENERAL)	DURATION OF ACTUAL PROGRAMME	STAFFING & HRS PW	
						In Group	Out Group
Otago Conductive Education Trust	Group	6 3-9 yrs	Otago Regional Health Authority	Moderate to severe disability	5 x 4.5-hr sessions	T 22.5	15.0
						TA1 22.5	0.5
						TA2 15.5	0.5
						TA3 6.5	0.5
						TA4 4.0	0.5
						TA5 16.0	0.5

Key: T - Teacher
TA - Teacher's Aide

* For 8 months the Otago programme has been without a conductor. Strictly speaking, during this time the programme changed to an alternative model. However, this state of affairs was only a temporary condition for by the time this study was published Otago once again had a Hungarian-trained conductor. Thus it can still be classed as an adaptive model programme.

Alternative Model Programmes

Wilson Home School

LOCATION	GROUP NAME	NUMBERS OF CHILDREN	CATCHMENT AREA	DIAGNOSIS (GENERAL)	DURATION OF ACTUAL PROGRAMME	STAFFING & HRS PW	
						In Group	Out Group
Wilson Home School - Holistic Programme	Preschool developmental group	7 3-6 yrs	Auckland metropolitan region	Very severe multiple disability + 1 medically fragile	4 x 5-hr sessions per week	SET1 16.0 PT1 8.0 OT1 7.0 SLT1 5.0 SEA1 16.0 TA1 16.0 TA2 10.0	11.00 0.25 0.25 0.25 8.00
	School age group 1	5 5-11 yrs		Severe multiple impairment	5 x 6-hr sessions per week	SET2 25.0 PT1 10.0 OT1 8.5 SLT1 6.0 SEA1 5.0 TA3 25.0	2.25 0.25 0.25 0.25
	School age group 2	6 5-8 yrs		Medium motor disability	4 x 6-hr sessions per week	SET3 20.0 PT2 20.0 OT2 20.0 SLT1 6.0 TA4 9.0	2.25 0.25 0.25 0.25
	School age secondary	10 13-21 yrs		Profoundly impaired	5 x 6-hr sessions	SET4 25.0 PT3 3.0 OT3 3.0 SLT2 3.0 SEA2 25.0 TA5 25.0 Psi1 0.3	2.25
	Rehabilitation group	9 5-21 yrs		Health impaired	5 x 6-hr sessions	SET5 25.0 PT2 10.0 OT2 10.0 SLT2 13.0 SEA3 25.0 TA5 27.5 TA6 18.0 TA7 18.0	3.0

Key: C/T - Conductor/Teacher
 SET - Special Education Teacher
 OT - Occupational Therapist
 PT - Physiotherapist
 SLT - Speech Language Therapist
 TA - Teacher's Aide
 SEA - Special Education Assistant

Carlson School for Cerebral Palsy

LOCATION	GROUP NAME	NUMBERS OF CHILDREN	CATCHMENT AREA	DIAGNOSIS (GENERAL)	DURATION OF ACTUAL PROGRAMME	STAFFING & HRS PW	
						In Group	Out Group
Carlson School for Cerebral Palsy	Mother and baby SMILE (a) Advanced (b) Beginner	(a) 6 6mth-2yrs (b) 7 18mth-3yrs	Auckland metropolitan region This area includes: Nth Shore West Auck., Sth Auck. Cent Auck. (Browns Bay in Nth to Drury in South)	Moderate to severe incl. multiple disabilities	(a) 3x2-hr sessions per week (b) 3x2-hr sessions per week	T/C TA M/H (Plus part-time support from OT, PT, SLT, & T)	Support from T/C, TA, OT, PT, & ST as time allows
	Room 9 SMILE centre	7 3-5 yrs		Moderate to severe CP incl multiple disabilities	3 x 5-hr sessions per week	T PT OT SLT TA	Mother /helpers plus staff
	Room 8 SMILE centre	10 3-6 yrs		Same as above incl 1 spina bifida and 1 brain tumor	Varies from 5 full-day to 2 full-day sessions	T SEA OT SLT PT TA	All staff
	Room 6 Junior class	8 3-8 yrs		All diagnosis of CP as above incl. 1 profound deaf and 1 dwarf	Full 5-day sch prog. (9am-3pm) for 5 chn. 3 days or less for remainder	T SEA (Plus part-time, PT, OT, SLT, and TA)	Part-time: PT, OT, SLT, TA, T, SEA
	Room 3 Junior class	9 4-7 yrs		All diagnosis of CP as above incl 1 spina bifida	Full 5-day sch prog. (9am-3pm) for 8 chn. 3-day for 1 child	T TA (Plus part-time PT, OT, SLT, TA)	Part-time: PT, OT, SLT, TA, & T.
	Room 4 junior integrated class	12 5-9 yrs		Mild to moderate CP incl. 1 road accident victim	Full 5-day school programme (9am-3pm)	T TA SEA PT OT SLT	
	Room 5 Senior class	13 9-19 yrs		All diagnosis of CP as above incl stroke, road accident and deaf	Full- time school programme of 5 days per week (9am-3pm)	T TA SEA PT OT SLT	

Key: T/C - Teacher/Conductor SLT - Speech Language Therapist
T - Teacher TA - Teacher's Aide
OT - Occupational Therapist SEA - Special Education Assistant
PT - Physiotherapist MH - Mother Helper

Child Potential Unit - Rotorua

LOCATION	GROUP NAME	NUMBERS OF CHILDREN	CATCHMENT AREA	DIAGNOSIS (GENERAL)	DURATION OF ACTUAL PROGRAMME	STAFFING & HRS PW	
						In Group	Out Group
Child Potential Unit Rotorua	Junior group 1	4 3-8 yrs	Thames Rotorua	Spina bifida Moderate CP	Term 1 4 x 3-hr sessions per week	OT1 4.0 OT2 2.0 PT1 2.0 T1 4.0 Vs 24.0	3.0 3.0 3.0 3.0
	Junior group 2	5 3-10 yrs	Thames New Plymouth Rotorua	Spina bifida moderate to severe CP	Term 3 4 x 3-hr sessions per week	OT 4.0 OT 2.0 PT 2.0 T 4.0 Vs 24.0	3.0 3.0 3.0 3.0
	Parent/child workshop 1	3 3-10 yrs	New Plymouth Rotorua	Moderate to severe CP	January holidays - 1 week 5 x 5-hr sessions	OT 15.0 PT 15.0 T 15.0	2.5 2.5 2.5
	Parent/child workshop 2	5 3-10 yrs		Moderate to severe CP	August holidays 1 week 5 x 5-hr sessions	OT 15.0 OT 15.0 PT 15.0 T 15.0	2.5 2.5 2.5 2.5
	Mother/child group 1	4 18mths-3 yrs		CP Mod - 2 Severe - 2	Term 1 2 x 1.5-hr sessions per week	T 3.0 PT 3.0 TA 3.0	1.0 1.0 0.5
	Mother/child group 2	3 1-3.5-yrs		CP Mod - 1 Severe - 2	Term 2 2 x 1.5-hr sessions per week	T 3.0 PT 3.0 TA 3.0	1.0 1.0 0.5
	Mother/child group 3	3 1-3.5-yrs		CP Mod - 1 Severe - 2	Term 3 2 x 1.5-hr sessions per week	T 3.0 PT 3.0 TA 3.0	1.0 1.0 0.5

Key: T - Teacher
OT - Occupational Therapist
PT - Physiotherapist
TA - Teacher's Aide
V - Volunteers

PART B: INTERVIEWS³⁶

Perceived Training Needs

The results of the interviews fall into 7 separate categories of response as determined by the interview schedules. Because the present study was principally concerned with training needs, this part of the results section centres on the perceived training needs of those interviewed, including their perceptions about others' training needs. At the end of each numbered subsection there is a "comment" section on how the identified needs might be met.

The reader is asked to note that this study is not designed to evaluate the overall effectiveness of conductive education, nor is it by design or action critical of any persons who were interviewed. Any commentary on what follows about perceived training needs should be seen as an attempt to strengthen the practice of conductive education in New Zealand whether for conductors, specialists, "other" staff, parents, or the community.

The convention used below to gather together questions relating to training is to code the particular question in the relevant interview schedule (i.e., Q 25) and then follow it with a summation of the collective responses. Other questions in the interview schedule not included here were deemed not to have contributed to the identification of training needs for this part of the survey.

There are 2 categories of "others" used in this section. There are "other" staff meaning all those staff employed by the programme not including co-ordinator/managers, chairpersons, conductors, committee members, specialists, and parent/caregivers. "Others", as used in the 7 headings for each category of perceived training needs by different groups, means those in the other remaining 6 categories.

Training Needs Perceived by Co-ordinators/Managers and Others (N=7)³⁷

Q 25 The co-ordinator/manager is in a good position to see the overall training needs of all the staff

³⁶ Apart from Dr Miles at Rotorua Hospital and Dr Kathleen Liberty of Canterbury University, who were unable to meet the researcher during his visits, all other key contributors were included in this study.

³⁷ At the time of the interviews there was no co-ordinator/manager at West Auckland or Wellington. The Auckland Cerebral Palsy programme had both a manager and an administrator. The latter was not permanently situated in the programme at Ponsonby but made daily visits to the programme. Wellington had a co-ordinator/manager from 25 January 1994 and West Auckland was expecting to employ someone in this capacity from the beginning of February 1994. This means that all the adaptive programmes will have an on-site co-ordinator/manager to oversee and/or administer the daily activities from February 1994.

in and around a programme (including their own needs). When they were asked whether there were any urgent training needs in their programme, 6 out of 7 replied that there were.

- Q 26 Three of these considered all staff had urgent training needs, while in 2 programmes it was the conductors and their assistants who were most in need of training. One co-ordinator/manager mentioned the need for those working in the Special Education Service (SES) and other early intervention programmes should be trained in how to work in with the conductive education programmes. Another co-ordinator/manager said that the emphasis should be placed on training the community, especially parents.
- Q 27 In meeting these training needs it was suggested that the conductors could be more open and arrange visits for outsiders (especially other professionals) to the programme, provided that these visits ended in realistic training sessions dealing with specific skills. Over all, when referring to all staff, the emphasis was on co-operative forms of inservice training.
- Q 28 When specifically asked about the training needs of conductors, the 7 co-ordinators/managers all agreed that there was something they needed. Emphasis was on English-language skills and knowledge of the education and health systems. There was also a strong suggestion that the conductors' sensitivities to New Zealand society and culture needed to be recognised. One co-ordinator/manager summed it up this way: "There is a need for conductors not trained in New Zealand to develop an understanding of New Zealand education, the curriculum, and to recognise the expertise of other professionals in the field". This same person also pointed out that this applies equally to other professionals in the health sector such as physiotherapists, occupational therapists, speech language therapists, paediatricians, and so on.
- Q 32 Co-ordinators/managers identified training needs in other people working in the programme. In general terms they identified assertiveness training, for both parents and staff, co-ordination skills for the co-ordinators/managers, and management skills for all the staff including the board of trustees. While not ruling out off-the-job training, most of the training that was mentioned was of the on-the-job variety, provided in most cases by the conductor. "Other" staff, it was claimed, would benefit from conductor instruction on team building and in developing skills which would best assist support staff in facilitating the work of the programme and orthofunction in children.
- Q 34 On the question of whether the parents needed training the co-ordinators/managers were divided. Those who argued that the parents did not need training claimed that this was because parents were already heavily overloaded and that what they got from the conductor during the group sessions was adequate for their needs. On the other hand, those who said that they did need training pointed to training in parental issues such as assertiveness and advocacy, an understanding of conductive education, and information on medical terms and conditions. One co-ordinator/manager summed up the parents' position this way: "Parents always work in the best interests of the children if they have an understanding of what they are doing".
- Q 38 In this respect it was the conductors who were considered the best instructors for the parents and who were best able to meet most of the parents' needs. Providing off-the-job training for parents was regarded as a relatively difficult task, given that parents with children with motor disabilities are already fully stretched and may be near breaking point. A useful suggestion made more than once was that if some kind of formal training was required then it perhaps

should be offered to a parent in a package form within their home, so that they can do it at their leisure (if they have any). It was recognised by 5 co-ordinators/managers that the New Zealand Foundation for Conductive Education had a responsibility to lighten the parents' burden, if it could, and therefore it seemed appropriate for the Foundation to take part in developing self-instructional aids for parents.

- Q 41 With 2 exceptions, co-ordinators/managers believed that specialists (including doctors) required some kind of training. Most of these specialists were associated with the programmes and included occupational therapists, physiotherapists, speech language therapists, and psychologists. The reason why they need training is because in most cases they do not see conductive education as a viable option nor do they work particularly well as part of a team; or, as one co-ordinator/manager put it, "... meet the holistic needs of the child". It was recognised by all but one co-ordinator/manager that health-employed professionals acquired their views and attitudes from their profession and that their professions probably needed training as well. In these cases the training was directed at providing information on conductive education particularly its philosophy and how conductors went about using handling skills.
- Q 46 While it was also recognised that conductive education was new to New Zealand, it was felt that the professional bodies of the individual professions, as well as the New Zealand Foundation for Conductive Education (in conjunction sometimes with the tertiary training institutions) could provide the kinds of general knowledge courses that would be useful in breaking down professional prejudice against conductive education. Naturally, in a user-pays environment, it was generally considered that the individual should bear the cost of any training although 3 co-ordinators/managers considered the state had some role to play in funding training. Three co-ordinators/managers, however, considered that it was a professional's own responsibility to "update ongoing training".
- Q 48 In the case of the co-ordinators/managers' interview, doctors were treated separately because they played an important part in referring children to the programmes and in some cases blocked referrals to a programme. It was considered that the co-ordinator/manager was in a good position to comment on the attitudes and the needs of doctors in this respect. In this instance all seven co-ordinator/managers said that doctors had definite training needs in relation to accepting conductive education as a viable alternative intervention for children with motor and multiple disabilities.
- Q 49 By and large the general opinion was that the doctors, principally paediatricians, had very little information on conductive education. In some cases their minds were said to be closed to alternative approaches outside accepted traditional therapies for cerebral palsy. Given the very short paediatric training time in a medical intern's education, it is not surprising that very little is known about alternative methods of treating cerebral palsy. As one co-ordinator/manager said: "Doctors generally ... have a limited view of therapy". What they need, according to all co-ordinators/managers, is an appreciation of conductive education, its philosophy, and its practices. Because doctors have a particular role in referring parents to different treatments, it was considered vital that they be informed about not only conductive education but also a wide range of options available to the parents. In this respect the excellent written advice sheet on therapy options provided by Dr Rosemary Marks in

Auckland was praised by the Auckland co-ordinators/managers as the kind of advice which ought to be given to all parents by their paediatrician.

Q 53 It was suggested, too, that the best time to educate doctors was during inservice training courses. However, because of their busy programmes it was considered essential that the New Zealand Foundation for Conductive Education introduce an education programme for doctors as soon as it is financially possible to do so. Acknowledging that doctors have a responsibility for their own up-skilling, it was also recognised that they can quite often miss out on information about worthwhile programmes such as conductive education unless someone brings the information to their attention.

Q 54 The co-ordinators/managers identified key officials who have considerable influence over funding and the development of conductive education as a service. All identified government officials in health and education and, in some cases, community leaders and politicians. The kinds of training that they required was judged to be information that would dispel the myths and misconceptions about conductive education and provide intelligent people with succinct facts so that they would be in a position to provide others with options and choices, given the resources available at the time. The best way of dealing with the education and training needs of this group was judged to be through community awareness programmes, good ambassadorship projects, higher public profiles of key programme staff, and judicious publicity and lobbying by pressure groups when the time was right.

Q 59 In the open-ended section at the end of the interview schedule, all but one co-ordinator/manager mentioned the need to integrate the Hungarian conductors into the New Zealand culture in a mutually beneficial way: "Both New Zealanders and Hungarians need to understand each other better", was a common view. This epitomised the general attitude and concern of all co-ordinators/managers.

While it was recognised that conductive education is currently going through a somewhat painful process of evolution since it was introduced into New Zealand in the late 1980s, there are encouraging signs that a glimmer of understanding is seeping through into the community at large. Some of the mistakes that were made in the past in the management of some programmes could be dealt with (in the view of one co-ordinator/manager) through appropriate training courses for the board of trustees and by defining their roles more clearly.

In conclusion, although the training of conductors in New Zealand was regarded as an inservice matter, 2 co-ordinators/managers raised the issue of the training of conductors (preservice training) in contradictory terms. One suggested that training conductors could only take place in Hungary while the other suggested that conductors could be trained in New Zealand "as long as they have training in the philosophy of conductive education (a la Petö)".

Co-ordinators/Managers

What they said they needed

- Co-ordination skills
- Management skills
- Interface between education and health

What Others said they needed

- Co-ordination skills
- Administration skills
- Take a visit to Hungary to see "pure" conductive education
- Read about, and watch videos on conductive education
- Hands-on experience of conductive education
- Paediatric, neurodevelopmental information
- Understanding of conductive education

Comment: Co-ordinators/managers' levels of prior skill ranged from experience in running a school to recent secretarial training. Both they and their peers in the programmes saw the need for management training and familiarity with the education and health systems. Although the co-ordinators/managers did not themselves see the need for other kinds of training, it was obvious to their peers that they could benefit from an in-depth study of conductive education and an understanding of motor and intellectual disorders in young children.

There was some concern about the need of specialists to understand the philosophy and practices of the conductors and to be more understanding of their needs. In a more critical vein, the suspicions of conductive education held by many doctors, especially paediatricians, were seen by co-ordinators/managers as an unfortunate hindrance to the expansion of the programmes. They all agreed that doctors should be educated about conductive education so that they could make an informed judgment about whether this intervention was an appropriate alternative for a child or adult with a motor disability.

In one case, the conductors in a programme believed that their co-ordinator/manager needed to see "pure" conductive education in operation before their needs would be understood. This problem can be handled through videos, readings, and discussions about what form conductive education should take in New Zealand. If co-ordinators/managers are trained in management skills, then their training will overcome what may be simply a misunderstanding about roles and performance within an adaptive model programme.

Training Needs Perceived by Chairpersons and Others (N=8)

Q 45 With one exception, chairpersons of programmes (and one manager acting for a chairperson) considered that their conductors needed training. In 3 cases this was regarded as both preservice and inservice, with most of the training directed at orienting them to the New Zealand education system and culture such as the location of services and support personnel, the Treaty of Waitangi, New Zealand culture, standards of performance in New Zealand early childhood education centres, and so on. In one case it was suggested that the conductors were not only responsible for their own professional development but that they should rely on their own resources to provide it. In all the others, it was considered that the conductors would need

the assistance of programme management or outside experts to help them acquire the training they required. Opinion on who should pay for the conductors' inservice training was clearly divided between those who considered the training provider and the individual should share the costs, and those who thought the employing agent should be responsible. In general, the belief was that if the conductor required leave with pay, then the management committee would have to look at whether the programme could afford it; if they asked for leave without pay, they would be expected to pay for their own self-development.

Q 50 Most programmes appeared to be prepared to send their conductors away for training during the year if it was thought that they needed such training. This was because it was considered that there would be a flow-on effect into their work in the programme. Nevertheless, there appeared to be a specific and finite time that a conductor could be absent from the programme - too long and the programme would have to close down.

Q 52 When asked about other professionals, and whether they needed training, 4 said "yes" and 2 said "no". Of those who said "yes", the most common specialist was a paediatrician, with physiotherapists, occupational therapists, speech language therapists and special education support staff also mentioned.

The rationale for training specialists was that they need to be able to provide the parents and child with the best information available and the general feeling was that such information is not being given at the present time. The kind of training that was suggested was for all specialists to deal in a common language, to communicate effectively, observe the programmes at the different levels, talk to the conductors and parents, engage in research, and publish the results, and so on. Apart from the usual tertiary-training providers, it was understood that the governing body of the programmes and the New Zealand Foundation for Conductive Education might also provide the kinds of training mentioned previously.

Q 58 On the matter of training programme staff, managers and chairpersons said that in 7 out of 8 cases their staff needed training. Carlson School, the exception here, considered that all its staff were well trained. Of those who did need training, parents and conductors' assistants featured prominently. All staff, no matter who they were, required training according to 6 out of the 8 managers/chairpersons.

The kinds of training required by staff were:

- Something on the theory and practical application of conductive education to programme activities.
- General therapy information so that they could pass on this information to parents about the best deal for the treatment of their child.
- Liaison skills - especially for therapists.
- Guidance in role definitions for therapists and teaching staff, mostly in the physical aspect of the conductive education.

The kind of training required had to fit the individual, rather than the programme; in other words, if an individual left, the training needs for their replacement would be totally different.

In some regions it was felt that early childhood education people needed particular training

in conductive education and its integration of theory and practice. For these people, it was suggested that formal training could be run by the conductors, although other kinds of training could be obtained from a college of education's early childhood education section or special education section.

Q 61 There was a 3-way split about who should provide this training to other staff. One group suggested that it was the responsibility of the trust, another suggested that it was the responsibility of training providers, and the third group suggested that it was the conductors and/or an early childhood education teacher with input from the co-ordinator/manager. The latter was seen as the best person to provide the in-house training for other staff. When asked who should pay for the training, opinion was divided evenly between the Government and the programmes themselves.

Q 64 In the general comments at the end of the interview schedule, the opportunity was given to respondents to discuss matters about funding and training that had not yet been mentioned. Three of the chairpersons drew attention to a wide range of matters about the professional development of staff and in particular conductors. Two of the 4 who chose to comment at the end of the interview mentioned that in their view, the training of conductors could not be done in New Zealand. They reasoned that:

- There was little demand and need.
- The cost would be too high.
- There were doubts about the competence of those who would give the training.
- There is not a wide enough range of children with disabilities.

Nevertheless one of these managers recommended that a residential conductive education centre be set up to allow people to attend a centre for 3 months. At the centre conductors could:

- Train conductors' assistants.
- Undertake research.
- Provide a forum for professionals to be involved - seminars.
- Allow conductors to gain exposure to a master conductor who at best would be a visiting specialist in conductive education from overseas (preferably the Pető Institute).

Chairpersons

What they said they needed:

What others said they needed:

- Paediatric, neurodevelopmental information
- Understanding of conductive education
- Understanding of different disability conditions

Comments: None of the chairpersons indicated that they themselves needed training to do their job. However, others connected with their programmes suggested some needed training in terms of understanding conductive education, early childhood development, and neurological disabilities. Considering that chairpersons are in strong position to influence policy and occasionally recruit conductors, it would appear that they need to be "right up with the play" when it comes to dealing with issues in conductive education. From what has been said here, chairpersons ought not to assume that they have all the necessary skills to deal with the range of issues they are faced with.

There was some interest shown in providing a centre for conductive education which might have a role in training people to work in programmes. This was a minority view but supports the general feeling among many interviewed during this study that vacation courses (including summer schools) might serve a useful purpose not only in training support personnel but also as a focal point for new developments and research on conductive education.

Training Needs Perceived by Conductors and Others (N=9)

- Q 11 It would not be appropriate to talk about the inservice training of conductors without considering their views on working with other conductors and the benefits they derive from consulting each other over selection and schedules. Those who have worked alone considered it was a disadvantage not having someone who "knows" what to do. It appears that having to take time out to train parents and caregivers, as well as not having someone to discuss development and planning issues, with is seen as a drawback to working alone.
- Q 12 Those who do work with other conductors said the advantages of this were that they reinforce one another, think together, rotate leadership, gain support from each other, seek advice from each other, run larger group sessions, offer a greater range of group sessions, and "know what to do without being told".
- Q 14 In New Zealand, conductors even if they work with other conductors rely upon the contributions of a wide range of skilled and unskilled support staff. These support staff, in all but one instance, were considered "in need" of training. In the view of the majority, the training should be directed at making the support person more efficient and better able to carry out the instructions of the conductor. In the case of the exception, the training was not needed because support staff had previous training and experience with children.
- Q 16 When narrowed down to the kind of training that was required, support staff appeared to need information about how conductive education works, and what to do when physically handling children with motor disorders.
- Q 18 In the view of the majority of conductors, the training is best provided in an on-the-job situation. Even so, it was recognised that off-the-job work could be done by conductors when they visited schools and parents. Support staff were best dealt with at in-house workshops during the year.
- Q 20 When asked how the conductors kept up to date with their work it was clear that the majority had good links with Hungary and knew what was going on in New Zealand through the telephone and the networks they had set up in both countries. However, they were generally ignorant of what went on in other parts of the world where conductive education is being practised.
- Q 23 The concept of inservice training was well known to them for about half had advanced their

own training once they left the Pető Institute. When asked if they would personally benefit from having some sort of inservice training in New Zealand all but 2 said "yes". The 2 replied "no" gave different reasons. One experienced conductor believed that she could go no further with training in New Zealand because there was no Pető-style institute available. The second, recognising her limitations in English, linked this to a reluctance to undertake any kind of inservice training.

- Q 25 Inservice training that was identified by conductors as needed for themselves appeared to be primarily of the off-the-job kind, with a credit such as one would receive for upgrading one's qualifications at a university, polytechnic, or college of education. Two were already going to university, 2 wanted to go to university, and the rest considered that by reading newspapers and books, visiting schools, and talking to parents, teachers, and therapists, they would gain enough information to get by. When asked if any qualifications acquired here in New Zealand should be recognised both here and in Hungary, 7 said that they would prefer them to be recognised in both countries.
- Q 26 All but one conductor acknowledged that it was useful to learn about New Zealand culture; all agreed it was useful to learn about the New Zealand education system.
- Q 36 At the end of the interview, the conductors were asked if there were any other matters concerning training or their job that concerned them. Six conductors responded that it was impossible and undesirable to train conductors in New Zealand, indicating a high degree of unanimity on this matter. Their reasons centred on the complexity of the teaching programme and the absence of master teachers (i.e., conductor teachers). They also pointed out that New Zealand was so small that it lacked a sufficient number of children within the wide range of children with disabilities. On the other hand, 2 of the conductors, in speaking around this issue, admitted that it might be possible to set up a Pető-style training institute in New Zealand as long as it was based in Auckland and lecturing staff were brought out from Hungary to teach there.

While all conductors agreed that there should be training for support staff in the programmes leading to a recognised qualification, they were concerned about NZQA's acceptance of their own Pető Institute qualifications. Those who had looked at the question of equivalence of qualifications in New Zealand and Hungary stated that NZQA had not truly recognised the worth of the Pető diploma although there are 2 known instances of its recognition by NZQA. When contacted, NZQA indicated that each application for equivalency was being treated on its merits and that some conductors had already been awarded a primary teaching equivalency.

Conductors

What they said they needed

- Support and reinforcement that is provided from working with other conductors
- Inservice training in New Zealand (Peer discussion)
- University post-graduate training (Continuing Education)

What others said they needed

- English language skills
- Knowledge of the NZ education and health systems
- Sensitivity to NZ society and culture
- Interpersonal communication skills
- Experience in conductive education for leaders
- Knowledge of the role of team leader in NZ sense of the word
- Knowledge of developmental assessment
- Ability to diagnose motor disabilities
- Familiarity with use of technology
- Paediatric neurodevelopmental information
- Understanding of different disability conditions
- Training to be trainers
- Peer performance assessments (both internal and external)
- To accept that children should be encouraged to do their own thinking and decision making

Comment: It is clear from this study that the conductors in New Zealand see themselves as fully trained professionals with little need for further training at this time. Having said that, it should also be said they agreed with the proposal that inservice training would be useful as long as it focused on peer meetings and followed the usual practice of sharing of work-related experiences. Two people were studying at university for career development but in subjects relating to general education not special education or therapy.

On the other hand, given the list in the right-hand column above, there are many of the conductors' New Zealand colleagues who think they need training in a wide range of subjects. These perceived training needs fall into 2 main categories:

- Adjustment to working in New Zealand.
- Limitations in the conductive education approach to treating motor and other disorders.

The first is understandable given the newness of the programmes and the fact that the Hungarian conductors (with one exception) have had difficulty in communicating in the English language at one time or another.

The second is more difficult to deal with given that conductive education is embedded both in Hungarian culture and in Pető Institute working styles; this makes it difficult to share professional points of view with traditional specialists and thereby reach a compromise, or at least an understanding of each others position. The conductor's approach to learning and treatment is seen by a large number of specialists in the present study as simply misguided. The specialists also feel that the conductors are ignorant of what New Zealand professionals have to offer people with disabilities. Whether this is true is not the purpose of this study, but it explains some of the training needs listed above and suggests that programmes might do well to consider this a training matter rather than a difference of professional opinion.

Training Needs Perceived by Programme Committees and Others (N=35)

(Note that while the views of 35 people were canvassed in this category, the democratic convention of group interviewing requires that their responses be blended into a combined response.)

Q 26 Of the 6 programme committees which responded to the question on the training needs of co-ordinators/managers, 3 could not comment because they had no co-ordinator/manager, 2 said their co-ordinators/managers needed more training, and 1 said no training was necessary. It was clearly difficult for the committee to identify specific training needs for co-ordinators/managers because the co-ordinators/managers were usually a member of the committee being interviewed. The impression gained from comments from 3 committees indicated that a co-ordinator/manager is appointed on the basis of his/her management skills and that he/she would be expected to undertake their own staff development if there was a need for extra training.

Q 27 The training deemed most appropriate for co-ordinators/managers was a mixed bag in that one committee indicated that their co-ordinator/manager did not need specialist conductive education training but did need training in administration and co-ordination tasks. In contrast, another group considered that training for co-ordinators/managers should include going to Hungary to see the "purest" form of conductive education, together with reading, watching videos, and having more hands-on experience.

All but 1 of the 6 committees (adaptive model) indicated that training was desirable for conductors. Training in cultural awareness, cultural differences, and an understanding of the New Zealand educational system were all seen as a high priority by the majority interviewed. In addition, training in interpersonal communication skills and English as a second language (ESL) were seen as desirable. For leaders, one group considered that newer leaders needed experience in conductive education.

All committees indicated that parents needed training. The training required was predominantly on the philosophy and theory of, and training in, conductive education, with regular feedback from the conductors themselves. Other single points mentioned were handling of children, medical knowledge, confidence building, and generally knowing why they were doing the things they were.

As with parents, all paid or voluntary staff needed some form of training. The majority thought training for staff should include training in conductive education - the theory of it, what it means, and how it operates - and hands-on experience where appropriate. Also mentioned were information on disabilities, handling the children, ethics, and communication

between professionals.

All respondents agreed that specialists needed training. One committee felt that specialists "... generally have no idea of conductive education and needed to be made aware of it". All groups indicated that there should be training in conductive education methodology and systems, and one group suggested that this information be imparted early in undergraduate training, so that specialists would then have an awareness of conductive education for referral purposes later on. It was felt that health professionals, including occupational therapists, would find it useful to have hands-on experience of conductive education.

All respondents said that there were training needs for others working in or around programmes. "Others" included: Special Education Service personnel who should "familiarise themselves with conductive education and get the global picture"; early childhood teachers who needed "hands-on" experience in dealing with children with special needs; and other associated health professionals who required an awareness of conductive education rather than specific training. One committee indicated that the trust/board/society should be mindful of the requirements of privacy and confidentiality dealing with children and adults.

- Q 28 When asked who ought to provide the training outlined above, all committees agreed that their own conductors were the most appropriate people to provide training for the majority of people working in or with their programmes. They identified the most urgent training need to be the theory and practice of conductive education. However, the New Zealand Conductive Education Foundation was also seen as a body that might be involved in running training courses. Other people mentioned tertiary education providers and specialists in education and health, and one group suggested a sympathetic specialist could pass on information to colleagues.
- Q 29 On the question of where the training should be done, the majority of committees felt that on-the-job training by conductors would be best for the hands-on aspect but that a suitable training provider such as the Auckland Institute of Technology could deal with the off-the-job aspects. One group suggested a college of education be encouraged to set up courses for post-graduate study, while another saw the New Zealand Foundation for Conductive Education as providing the means for imparting information to specialists and others. The consensus was that further training for conductors could best be provided at a tertiary institution.
- Q 30 The majority of committees were of the opinion that the Government should pay for training people in the theory and practice of conductive education. Some expressed the opinion that the New Zealand Foundation, the conductors, the Cerebral Palsy Society, or the user (if they could afford it) should "pick up the tab", reasoning that, while the Government is responsible for funding the Special Education Service, the employer, employee, and recipient all have some responsibility too. One group noted that orthofunctional mobility would save the Government money in the future therefore conductive education was a good investment.
- Q 31 When asked if there was any training going on at present 5 of 6 committees which responded indicated that there was. Conductors were training parents in practical, daily, hands-on routines, assistants were being trained on-the-job while working with conductors, and in one group, grief counselling and inservice training were being offered on a regular basis for the staff.

A follow-up question relating to who does the training drew these responses: people with appropriate academic qualifications in their fields; people with practical knowledge; the conductor; other staff members. This training is apparently being provided in universities, polytechnics, conductive education programmes (adaptive or alternative), and through part-time (modular) courses. Such training contributed towards a degree or diploma, involved a supervised practicum and was carried out by discussion and lecture. Of 4 responses, 3 of the committees said that they should pay for this training if it were necessary, while the fourth committee indicated that the Government and trainee should both pay.

Q 40 In commenting on general issues at the conclusion of the interview, 2 committees raised the issue of what Hungarian conductor training actually involved so that efforts could be made to adapt conductive education to New Zealand conditions. While training conductors in New Zealand was a controversial topic, 3 of the committees gave their support to this concept especially if it led to programmes that could offer whole-day education (i.e., 24 hours). One committee spent some time debating the value in offering group sessions from baby to adults arguing that:

- (1) Adults explain what is going on.
- (2) Group sessions provide for more clients.
- (3) Group sessions help develop a full range of services.

This committee also raised the issue of "mainstreaming" which they pointed out was a legal option in New Zealand. In their view school teachers needed more training on how to best integrate children with special needs into their classrooms.

Programme Committees

What they said they needed

- To be mindful of privacy and confidential requirements
- The opportunities to train teachers how to "mainstream" children with motor disabilities

What others said they needed

- Management skills and training
- Paediatric information
- Neurodevelopmental information
- Understanding of different disabilities
- Understanding of philosophy of conductive education

Comment: The governing committees of each programme are often in a good position to determine the training needs of staff and volunteers who are connected with their programmes. As they have taken on the responsibility for providing local training, and in some cases staff development costs, committees were generally supportive of undertaking conductive education undergraduate training in New Zealand if, according to one committee, the "mystery" surrounding how conductors are trained can be sorted out. They also supported training conductors and staff through inservice

courses in-house or externally through local training providers.

Training Needs Perceived by Specialists and Others (N=29)

During the visits to programmes, 38 specialists comprising teachers, occupational therapists, speech language therapists, physiotherapists, doctors, managers, psychologists, Special Education Service managers and orthotists were interviewed. At Carlson, 8 specialists were included in a combined interview, resulting over all in 29 separate viewpoints. These people were all associated with the running of a programme and, as trained professionals, were in a good position to comment on their own and others' training needs.

The health professionals were also well placed to consider the effectiveness of conductive education as an intervention for children with motor disabilities. Although initially critical regarding any new therapy alternative, they were generally supportive and had no difficulty identifying with the view that conductive education was an effective intervention under certain conditions.

It is not the purpose of this study to evaluate conductive education as an intervention in the field of motor disorders. It is nevertheless important that these positive views be noted. Conductors in particular, consider the therapists they came in contact with to be rivals rather than allied professionals. In many respects this is due to the different approaches and philosophies behind therapeutic treatments but in general there were enough specialists in support of conductive education for the conductors to rest easy. Nevertheless, salary relativity, language difficulties, unsubstantiated claims, and the closed nature of the Pető training process are all factors that have inhibited the co-operation of conductors and local specialists. (These matters are discussed again in the next section.)

- Q 5 It is not surprising then that all specialists responded "yes" to the question "Are there any barriers to introducing conductive education nationwide?" The reasons for these barriers are covered in the previous paragraph.
- Q 7 When asked whether the specialists would be interested in learning more about conductive education all but 3 responded "yes". Those who said that they did not need anything more claimed to have a good understanding of conductive education due in one case to a staff development programme which provided the opportunity for staff to go overseas to conferences and seminars on conductive education (alternative model programme).
- Q 8 In summary, the topics that specialists would like to know more about are: problem solving, experience in working in a Hungarian-conductor-led programme, research in conductive education, principles of conductive education, quality information on conductive education in English, specialist information on how conductive education operates including assessments, task progression, motivational methods, and group dynamics. For those interested in the operation of a programme, management skills and interpersonal communication skills were mentioned. The latter was considered by many specialists to be a weakness among conductors.
- Q 9 With one exception, specialists believed that trainees going to work in special education should be told something about conductive education.
- Q 11 On the question of postgraduate study for themselves, 13 would like training in neurodevelopmental intervention, 7 something specifically on conductive education, while the

remaining 9 considered that both courses of training would be of benefit to them and their work. In some respects it was ironic to be asking therapists whether they would value this kind of training because they complained that they did not have any kind of inservice, neurodevelopmental, intervention courses readily available to them.³⁸ In discussing this point, most of those in the therapy area considered that there was a great need for this kind of inservice training, even if conductive education had not come to New Zealand.

Q 13 All therapists could identify people involved in the conductive education programmes who needed training.³⁹ As might be expected it included just about everyone involved in the programmes, including most conductors.

- For the conductors the training required included understanding the New Zealand system of education (preschool and school-age children), developmental assessment, New Zealand's cultural climate (partnership arrangements, the role of team leading in the New Zealand sense, diagnosing motor disabilities), the criteria for diagnosis, the use of technology, responsibility as professionals, and interpersonal communication skill with parents and professionals.
- Support staff assisting conductors in programmes were identified as needing specific skills such as listening skills and knowing one's limitations.
- In general, specialists considered that everyone needed paediatric, neurodevelopmental information; an understanding of the philosophy of conductive education; and an understanding of different disabling conditions. This extended to the management of the programmes. There was some concern that expediency could result in not enough forethought being given to a child's orthotic needs and the long-term effects of certain kinds of equipment. A knowledgeable co-ordinator/manager was considered the person who could help settle this matter.
- Early childhood educators are identified as needing more information on special education, communication skills, visual stimulation activities, the purpose of visual stimulation, the way people learn and general interpersonal skills.
- Teachers' aides were identified as needing practice in positive reinforcement, speech language therapy, and instruction in developmental stages of human growth and augmentative procedures in learning.
- For therapists it was considered that, in general, they needed more knowledge of the education system and its methods, language development, facilitation, leadership techniques in conductive education and the philosophy of conductive education.

Q 16 Finally, at the end of the interview, the specialists were asked if there were any training-related matters that had not been yet raised. All but one mentioned at least one matter. The issues raised include:

³⁸ There are university/polytechnic courses offered but not of the kind that the inservice professional could easily attend.

³⁹ This misconception is taken up later in the study. Suffice it to say that there are both full-time and part-time courses for both OTs and PTs at Otago Polytechnic and Auckland Institute of Technology.

- A more thorough introduction to working in a conductive education programme;
- The management of mainstreaming.
- Acceptance of the fact that conductive education does not suit some parents and children;
- The perceived impossibility of employing the Pető-style programme in New Zealand;
- The need for a more professional approach by some conductors who were judged to be slack in their work habits;
- The need for research into the effectiveness of conductive education;
- Investigations into the shaky funding of some programmes;
- Exclusivity of conductive education and the secretiveness surrounding it;
- Isolation of conductive education programmes outside the New Zealand system of health care;
- The cultural appropriateness of some conductive education practices;
- Salary relativity and conditions of service;
- Selection of children for the programmes;
- The antagonistic nature of the debate between conductive education and traditional therapies;
- Parental choice in providing an intervention programme for children with motor disorders;
- The need to train conductors in New Zealand;
- The need to produce therapists with flexibility and the ability to think laterally;
- The lack of postgraduate training for therapists;
- The use of computers in conductive education training;
- The accountability of conductors;
- The transparency of conductive education content and methods;
- The need to model conductive education programmes as closely as possible to the Hungarian Pető Institute model, if this were known.

One specialist summed it up by saying that the problems associated with the work of the programmes in New Zealand were:

- (1) Problems with conductive education relating to the need to be integrated into the mainstream.
- (2) The differences between Hungarian and New Zealand cultures.
- (3) The need to train conductors for New Zealand conditions.

Specialists

What they said they needed

- Problem-solving skills
- Experience working in a Hungarian-led programme
- Research in conductive education
- Knowledge of principles of conductive education
- Quality information in English on conductive education
- How conductive education operates in such areas as assessments, task progression, motivational methods, and group dynamics
- Training in neurodevelopmental intervention
- Early training in conductive education for early childhood education personnel
- An awareness of conductive education rather than specific training
- More information on special education (early childhood educators)
- The purpose of visual stimulation and learning (early childhood educators)
- Positive reinforcement (teachers' aides)
- Speech language therapy (teachers' aides)
- Augmentative procedures in learning (teachers' aides)
- Education system and methods (occupational therapists, etc.)
- Language development (occupational therapists, etc.)
- Facilitation (occupational therapists, etc.)
- Leadership techniques in conductive education (occupational therapists, etc.)

What others said they needed

- Information on conductive education
- Effective communication
- Liaison skills
- Involvement in research
- Hands-on experience of conductive education
- Knowledge of disabilities
- On-the-job training for early childhood educators
- Awareness of what mainstreaming means for those with disabilities (teachers and teachers' aides)
- Exposure to and training for children with disabilities
- The resolution of differences of opinion over choices for parents and people with disabilities
- Opportunities to observe a conductive education programme
- The why and how of conductive education (teachers and teachers' aides)

Comment: Allowing for the range of different specialisations represented, there was a surprisingly long list of training needs identified by those specialists interviewed for this study. These needs fall into 3 groups and are mirrored by a lesser list identified by others working with conductive education programmes. These training needs can be categorised as follows:

- (1) Advanced study in their own specialisations currently not catered for by either their professional bodies or the education and health systems.
- (2) A keen interest in learning about the theory and practice of conductive education so that they can be reassured that it is as good as it is said to be.
- (3) Interest in the management of learning/teaching and research coming especially from teachers.

It seems clear from this study that if specialists are to have a key role in the future of conductive education, their training needs should be met through advanced study which not only focuses on the principles and practices of conductive education but also provides individuals with the opportunity to extend their own specialisations.

Training Needs of Parents/Caregivers and Others (N=45)

(Note that although there were 45 people interviewed, there were 17 separate group interviews, 3 programmes divided their parent/caregivers into separate groups according to when they were available.)

- Q 9 From the 17 groups canvassed, 11 indicated that they felt they needed more training to help in the conductive education sessions, while the remaining 6 said that this was not necessary as they received all they needed from the conductors.
- Q 10 When asked what training they would like, the majority said they would all like induction training. Such training might include an introductory course on conductive education, what it can do for parents and children, and why conductors do what they do in spite of other suggestions from parents and specialists.
- Ongoing training for parents was also seen as important, and suggestions for this included a workshop on conductive education, videos, and exercises. Other needs identified included an understanding of physical positioning, how the body works, the intent of task series, how to handle the children more efficiently, lobbying skills, time management, and coping with stress.
- Q 10 Eight of the 17 groups indicated that parents deemed the conductors the most appropriate people to provide all the training they needed. However, one group felt that administrative tasks, such as lobbying skills, time management and orientation; a workshop on conductive education; and exercises and options for parents could be provided by health professionals and knowledgeable parents. Another group considered that coping with stress would be best taught by health professionals and the techniques of massage by a trained masseur.
- Q 11 In reply to the question of whether they required training to help at home, equal numbers replied both "yes" and "no". One person who replied both "yes" and "no", said that they would like it but could not fit it in.
- Q 12 The question on what training they wanted led to the following responses: how to shower, bath, and handle children more efficiently; how to manage daily activities; home visits by conductors to show them that it was not always possible to do at home what they were expected to do; and assistance from doctors to provide them with some diagnostic information. Conductors were seen as the most appropriate people to give this training-related assistance.
- Q 13 When the question "Does anyone else connected with this programme need training?" was

asked the replies were a resounding "Yes!". Those most needing the training were:

- Doctors, paediatricians and specialists
- Early childhood educators
- Nursing staff
- Therapists
- Primary school teachers
- Teachers' aides
- Conductors
- Families/caregivers
- "Other" staff
- Policy makers
- The community
- Newcomers to the programme

Q 15 In response to the question "What training do others need?" these were the summarised answers:

- Doctors, specialists, and paediatricians need familiarity and understanding of conductive education as well as a knowledge of disabilities.
- Early childhood educators should have on-the-job training and primary school teachers and teachers' aides should be aware of what mainstreaming meant for children with disabilities.
- Nursing staff needed exposure and training to deal with children with disabilities.
- Therapists should have knowledge of conductive education and rehabilitation programmes.
- Caregivers/family members would be assisted by more awareness of conductive education and acceptance of disabilities in the community at large.
- Conductors needed more comprehensive speech and language programmes as well as a better understanding of New Zealand ways and means, and training to be trainers.
- Other staff members in each programme should endeavour to follow approved methods and know more about what they were doing.
- Policy makers and groups dealing with people with disabilities needed to share information, develop a broader approach and outlook, and have knowledge of rehabilitation programmes.
- Overall it was generally agreed that the majority of people involved in caring for children with disabilities needed familiarity with the philosophy and techniques of conductive education, and perhaps some specialists needed to look at resolving some unresolved differences of opinion over the choice of options that should be available to parents/people with disabilities.

Q 15 When given the opportunity at the end of the interview to mention other issues of importance most parents/caregivers had more to contribute.

- Some felt that many changes had taken place over a short period of time and that funding for conductive education either from education or health is still a major issue.
- Some parents consider the present adaptive model conductive education programme was

too hard and too long.

- One concern mentioned often by parents was that when they change over to conductive education all the traditional support systems disappear and they become uncertain about the future of their children.
- Concern about the lack of understanding of conductive education by professional groups who were seen by some parents as "protecting their own patch" has also emerged as a strong issue among parents interviewed in this study.
- *Some parents commented that it is important that conductive education continues in New Zealand and that there needs to be a national training programme for New Zealanders.*

Parents/Caregivers

What they said they needed

- Training when new to conductive education, including an introduction to conductive education, what it can do, and why conductors do what they do
- On-going training including a workshop on conductive education, videos, and exercises
- Understanding of physical conditioning
- How the body works
- The intent of task series
- How to manage children more effectively
- Lobbying skills
- Time management
- How to cope with stress
- Training to help children at home, e.g., how to shower, bath, and manage, daily activities
- A national training programme

What others said they needed

- Assertiveness training
- Confidence building
- Advocacy skills
- Understanding of conductive education
- Information on medical terms and conditions
- Training in handling of children
- Paediatric information
- Neurodevelopmental information
- Understanding of different disability conditions
- Learning acceptance of disabilities
- To view an orientation video
- A session with a conductor on conductive education
- Parent support groups
- How to continue with the programme at home

Visitors/Public Relations

Parents strongly supported the idea that anyone visiting a conductive education programme should have a pamphlet about conductive education detailing how the programme runs and how visitors should conduct themselves.

Comment: The training needs of parents/caregivers are focused more on their day-to-day needs than others interviewed in this study. They appear to want more training to enable them to assist their children cope with their disability both in and outside the home. Some of the training needs are related to dealing with the stress of having a child with a disability, and how to deal with the

extra demands the intervention of conductive education places on them and their families. What motivates the parents is the strongly held desire to see that their child gets the best assistance possible and becomes as independent as possible. They have confidence in what the conductor is doing but, at the same time, want to know why their child has to be put through certain task sequences. In other words, the majority of parents want to better understand the principles and practices of conductive education.

To others, the parents appear to be either too timid in standing up for their rights or too assertive in trying to push the conductor or leaders into work schedules that they believe would assist their child more effectively. To some, their understanding of human development and disabilities in particular is woefully inadequate. Broadly speaking, all those spoken to considered that parents in conductive education programmes needed more support than was generally realised. In this respect, it should be understood that while parents need training as much as the others interviewed for this study, many will not be able to avail themselves of such training. Some parents, of course, will be interested in taking a certificate or diploma course in the principles of conductive education if these are to be offered in the future, but the majority will find it hard enough making it to the programme sessions let alone taking part in extra curricular activities. Therefore, it would appear that offering training programmes packaged in video form may be the most expedient way of up-skilling parents.

Training Needs of "Other" Staff and Others (N=12)

"Other" staff are defined as those employed in one way or another to assist the conductors in the classroom or help the co-ordinator/manager with the administration of the programme. Sometimes these staff were highly trained in a profession such as teaching or nursing, and sometimes they had no previous training but were well motivated to work with children with disabilities.

Q 8 All "Other" staff at 7 of the centres indicated that they would like/need some training.

Q 9 In terms of the kind of training preferred, the majority of responses demonstrated the need for more information on the philosophy, theory, and background of conductive education (6), and for hands-on conductor training (5) with eventual certification a possibility (1). Individuals responded that they needed skills in working with children with disabilities, practical applications (methods), knowledge about why exercises were being done, basic physiological training, and how to deal with specific children with motor or learning disorders.

Q 11 All indicated that they would be interested in learning more about conductive education including general background information on special education and therapies. Five indicated an interest in how conductors were trained. More specific queries included: how the Petö model works in terms of techniques, what skills would best suit (i.e., the technical aspects of teaching children with neurological disorders), how children with disabilities develop, the way the brain functions, and why exercises are being done (6). Other aspects mentioned were the provision of conductor training in New Zealand and more general and regular on-the-job training.

Q 15 Other people mentioned as requiring training were:

- Parents/caregivers and family;
- Health care professionals, including doctors, specialists, and therapists;
- Education professionals, including teachers, teachers' aides, and those who work with

mainstream children with disabilities;

- Conductors;
- Support staff, including assistants;
- Occasional visitors and the general public.

Q 16 Groups made special mention of were:

- (1) Parents, caregivers, and family. For these people "It is like being thrown in at the deep end", said one "Other" staff member. It was felt a video could highlight the aims and objectives of conductive education. In addition, a session with the conductor giving information about conductive education and instructing them on how to continue the programme at home was considered a useful training adjunct. Parents also needed an opportunity to talk about their worries and fears (parents' support group) and to understand the extent of their commitment.
- (2) Health care professionals. Inservice training, workshops, what goes on in theory and practice in conductive education, and opportunities to observe a conductive education programme were all seen as requirements for health care professionals by the "Other" staff.
- (3) Education professionals, early childhood educators, school teachers, teachers' aides, etc. "Other" staff felt these people needed more knowledge about the "why" and "how" of conductive education, and opportunities to observe a conductive education programme.
- (4) Conductors: It was suggested that children be encouraged to do their own thinking and decision making in spite of what the conductors believed. Peer performance assessments, both external and internal, should be carried out. Maori and language issues also needed attention.
- (5) Support staff: They were seen as needing a sufficient level of understanding of conductive education to be efficient and knowledgeable assistants.
- (6) Visitors and the public: Pamphlets on conductive education, detailing how the programme runs and how visitors should conduct themselves, would be useful for this group.

"Other" Staff

What they said they needed

- More information on the back-ground, philosophy, and theory of conductive education Hands-on conductor training
- Skills in handling children with disabilities
- Basic physiotherapy training
- Information on how to deal with individual children
- Information on the way the brain functions

- Why conductive education exercises are done

What others said they needed

- Assertiveness training
- Management skills
- Team-building skills
- The theory and practical application of conductive education
- Knowledge of disabilities
- Skills for handling children
- Ethics awareness
- Communication skills
- Listening skills
- Knowledge of one's limitations
- Paediatric information
- Neurodevelopmental information
- An understanding of the necessity of following approved methods
- Knowledge of what they are doing

Comment: "Other" staff included those who have very little training but a desire to work with children with disabilities. Acutely aware of the need for training themselves, they were perceptive observers of the training needs of those around them, as the above results show. Their own "needs" list" includes not only information and training in the methods of conductive education but also general information on human development including disabilities and therapy. "Other" staff identified not only previously mentioned subjects but also communication skills and professional skills such as ethics, responsibility, following orders, and so on. Given these basic needs, it would be expedient for programme co-ordinators/managers to arrange training programmes for those who are the least trained and probably the least skilled of all the people working in, or in conjunction with, a programme. Because these people come into direct contact with the parents and the children (most act as surrogate mother helpers), it is important that they be well trained to do this job. Some of this training could be provided from within the resources of the programme, mainly by the conductor. But some will need to be provided by a local training provider, if and when courses are available.

Sources of Funding

An important determinant in meeting training needs is a programme's ability to fund training activities. In the case of adaptive programmes, funding daily operations, let alone training or staff development, is in most cases a "hand to mouth" existence. This is borne out by the coordinator/managers' answers to the following set of questions about the funding of programmes.

Q14. Where does the programme's income come from?

Most of the income for programmes comes from grants and fund raising, with education and health

allocations playing a lesser part. However, in two cases alternative model programmes were fully funded by the Ministry of Education, because they are part of special schools.

Q15. How is your funding allocated?

Salaries and wages generally used between 70 and 90 percent of the funding. Administration and operating costs were the next biggest user claiming between 10 and 20 percent of the budget.

Q16. Would you describe your financial position as healthy, balanced or unhealthy?

None of the coordinators viewed their financial positions as healthy. Five rated their financial positions as being balanced and the remaining four as unhealthy.

Q17. If unhealthy - Why?

Of the four who responded that their financial positions were unhealthy, two stated that this was so because there were no guaranteed sources of income, one programme said that it had insufficient resources to employ a coordinator and the other stated that most education funding had been withdrawn, the health funding was shaky and that they were working on reserves.

Q18. Prospects for future/new funding of the programme?

All programmes indicated that there were contestable avenues open to them for funding for at least some if not all of their programmes. These avenues included Regional Health Authorities, the Special Education Service, the Ministry of Education, fund raising, and private sponsorship.

Comment: As programme administrators become familiar with sources of government funding for children and adults with disabilities, the overall prospects for funding licensed and chartered programmes improve markedly (i.e., early childhood sector). Licensing and chartering applies to the early childhood centres only, although schools also have to have a charter which refers to the management of students needs. A special school or an "attached unit" (Ministry of Education term) in a regular school are possibilities; the first would be near impossible to achieve in the present economic climate, but the second is possible although not without some difficulty it appears. Setting up special schools, or even attached units at a regular school, is a major undertaking.

Apart from the established funding sources mentioned in the next part, there are other avenues only now being used for the first time (e.g., adult disability funding through the Department of Social Welfare) which are worthy of further exploration. In sum, the financial bases for the funding of most conductive education programmes appear to be steadily improving, making it possible for administrators of programmes to undertake more training initiatives.

PART C: TRAINING DEVELOPMENTS IN CONDUCTIVE EDUCATION: MATTERS RAISED DURING THE STUDY

During the course of this study, information on funding and training was gathered from a wide variety of sources in line with the objectives in the introductory section. What follows is a summary of this information as it applies to the different groups identified in Part B above.

1. Potential Government Financial Support for Conductive Education Programmes Including Training⁴⁰

Education

Early Childhood Development Unit: If a child is of pre-school age then the services of the Early Childhood Development Unit (ECDU) can be elicited by parents. ECDU aims to encourage and develop the "provision of quality, accessible, and culturally appropriate early childhood services." As a government agency contracted to provide services the ECDU provides the following services:

- community development;
- support for the establishment of early childhood centres;
- parent support;
- advice and support to playgroups and Pacific Island language groups;
- and advisory support and professional development for staff, management and parents involved in early childhood centres and home-based schemes.⁴¹

The second and last of these services could be useful to the conductive education programmes.

Funding

All chartered early childhood services are funded by the Ministry of Education as follows:

- \$2.25 per hour per child over two years of age for up to six hours per day, with a maximum of 30 hours per week;
- \$4.50 per hour per child under two years of age for up to six hours per day, with a maximum of 30 hours per week;
- capital works for non-profit making groups is available through a grant and capital loans scheme;
- Te Kohanga Reo, the Maori initiative in early childhood services, is funded at the same rate as for non-Maori although the funding is administered by a national Te Kohanga Reo Trust.

Kindergartens are funded in the following way:

- \$2.86 per child per hour up to eight three hour sessions (24 hours) per week;
- teachers' salaries have been included in the bulk grant since 1 March 1992.

Special Education Service: The Special Education Service (SES) "is a crown-owned entity offering a New Zealand wide service of advice, guidance and specialist support for the benefit of people with special educational and developmental needs. These include people with physical, intellectual, sensory, and other disabilities." SES services include:

⁴⁰ Information in this section of the report was gleaned from New Zealand Official Yearbook, 1993, published by the Department of Statistics. Citations in inverted commas refer to direct quotes from the Yearbook.

⁴¹ Ibid., p. 181.

- educational and developmental assessment and programming assistance for individuals, families, schools, and early childhood centres;
- specialist educational therapies and teaching;
- training for people working with those who have disabilities;
- placement assistance for schools, families and communities;
- early intervention teaching, support, and advisory services;
- specialist liaison services between schools and families;
- advice to government and non-government agencies on special education policy and practices.⁴²

The staff of SES include "advisors on deaf children, early intervention teachers and advisors, visiting teachers, speech language therapists, kai awhina, advisers on special needs and psychologist."

It is SES policy to encourage the mainstreaming children with physical or other disabilities. This means that children with disabilities who are judged able to cope with normal classroom work are enrolled with other children "at regular early childhood services and in regular classes at their local primary or secondary school. When necessary, buildings are modified, special equipment is provided, and ancillary staff are appointed to assist the teacher.... Increasingly, special education services are being taken to the children in regular classes and programmes, rather than withdrawing them to separate settings.... A comprehensive range of special education services has been developed for children whose needs cannot as yet be met in ordinary settings."⁴³

The 1989 Education Act gave New Zealand parents the right to enrol their children in a state school regardless of type or degree of disability. Parental choice now means that parents of children with disabilities have the right to use special schools or mainstream schools. More and more parents of children with disabilities are exercising their right to have their children integrated into regular classrooms. While this has had the effect of reducing unacceptable labels and categories it has created a problem for mainstream classroom teachers. The government has attempted to deal with this problem by increasing the allocation of teacher aid hours.⁴⁴ But as this study shows there is still a large gap between what is provided and what is needed.

The Ministry of Education is responsible for ensuring that all schools and early intervention centres have policies for dealing with children with special needs. In acting out its responsibilities the Ministry would not only check to see that schools have policies for students with special needs in their charters, but also allocate discretionary resources, on the recommendation of SES, to children in need of extra support. It is the Ministry's job to see that all children, regardless of their ability or disability, are adequately catered for by the education system.

⁴² Ibid., p. 181.

⁴³ Ibid., p. 192. Although this is the official view, a more realistic assessment of the situation is that the Government has provided special education in a range of separate settings: "There are special schools and special education attached units in regular schools available in some parts of New Zealand which provide between them a range of services for children with disabilities which some parents prefer because of the [diverse] amount of assistance available." (Note from Helen Stevens 13 April 1994).

⁴⁴ Private communication from Helen Stevens (SES).

Training for students who wish to enter the field of special education is offered at the undergraduate and post-graduate levels. At the undergraduate level there is a four-year Bachelor of Education degree (Speech-Language Therapy) at the University of Canterbury for those wishing to become speech/language therapists. The universities of Auckland and Otago provide post-graduate training for those wishing to become educational psychologists.

At the postgraduate level there are one-year courses for trained teachers wishing to work in the field of special education at Auckland, Palmerston North, Wellington and Christchurch colleges of education and one-year postgraduate courses for training teachers of the deaf at Auckland and Christchurch colleges of education. There are similar courses for training teachers of the visually impaired in Auckland and Christchurch. Teachers wishing to study Special Teaching Needs can include three specialist papers in their Higher or Advanced diploma qualifications.⁴⁵ There is also a one year course for training teachers of the deaf to become advisors on deaf children. There are no specialist courses available for teachers wishing to specifically work with those who have physical disabilities.

A one-year post-graduate courses, the Diploma in Early Childhood Intervention is available to early childhood educators at the Auckland College of Education. In collaboration with SES this course is now available in select parts of the country on a part-time basis over two years.

Health

Ministry of Health: While the Ministry of Health is responsible among other things for policy and finance of disability services it is the Regional Health Authorities (RHA) which purchase health and disability services for New Zealanders. RHAs then manage contracts with health service providers through their Disabilities Support Services ensuring in the process that they receive "the best possible standard of care, at the best possible price". In this respect contracts could be let to public (e.g., Crown Health Enterprises (CHEs), private or voluntary agencies. It is the cost/benefit ratio that determines who is commissioned to provide the service, although at this stage traditional patterns of service provision still apply.

The training of Ministry of Health staff most in contact with conductive education programmes applies to physiotherapists and occupational therapists. Both these allied but different professional groups have clearly defined undergraduate training programmes. Full time four-year degree courses are offered at the Auckland Institute of Technology and Otago Polytechnic for student physiotherapists; the latter polytechnic has a conjoint arrangement with the University of Otago. There are three-year training courses for occupational therapists at both the Auckland Institute of Technology and Otago Polytechnic. The post-graduate training of therapists is taken up later in the report.

2. Levels of Required Conductive Education and Training

While the provision of education and training for people associated with conductive education programmes is the main focus of this study, the level at which this training should occur has featured

⁴⁵ The papers are: C06.10 Teaching Special Children in the Mainstream; B06.15 Educating Young Children with Special Teaching Needs; B06.24 Learners with Special Abilities.

as a talking point throughout the study. Considering that the objectives for the study included a directive to look into the training of conductors, it was not surprising to find that different people held very different views on whether it was possible to countenance such a project outside the Pető Institute.

As mentioned above, there is overseas evidence that the issue of training conductors outside Hungary will be a debating point for some time to come. Nevertheless, as the future of conductive education looks bright and the demand for trained conductors exceeds the ability of the Pető Institute to supply the increasing world demand, other alternatives must be considered. To this end the present study canvassed views on the training of conductors in New Zealand, as well as the training of others associated with conductive education programmes.

This notwithstanding, the provision of an education and training course for the training of conductors is probably some years away and may not ever be undertaken in this country if a suitable venue cannot be found. Contrary to strongly held opinions, there is no evidence to suggest that this kind of training cannot be done outside the Pető Institute. It is only a matter of time before the resources are put together to make this happen.

The overwhelming finding in this study is that nearly everyone spoken to considered training an important issue and nearly everyone identified their own and "others" training needs. What is more, even though there was a split decision on New Zealanders' ability, indeed their predisposition, to train conductors in the future, nearly everyone agreed through their comments and identification of needs with a 3-tiered approach to education and training for those working in the field of conductive education:

1. An undergraduate conductor education degree;
2. A postgraduate diploma in the principles of conductive education; and
3. A series of short courses (on and off-the-job) aimed at providing interested parties with work-specific education and training to enhance their work in and around a conductive education programme.

It was noted that some of the identified education and training should be provided by a registered training provider with the mana and ability to award degrees and diplomas, while the rest could be arranged through local training providers in conjunction with the local programmes.

3. Undergraduate Degree in Conductive Education

The Training of Conductors at the András Pető Institute

A number of therapists and parents of children with motor disabilities have visited the Pető Institute in Budapest in Hungary. When asked about the training of conductors, no one appeared to have a clear idea of what was involved. Even trained therapists were unclear on this point, mainly because of the impregnability of the language and the short duration of their visits. Rowena Somogyváry, the liaison person for the Foundation for Conductive Education (UK), was unsure of the course content, describing what was in the "Green Book", the Pető Institute's teaching manual, as a collection of somewhat incoherent passages when translated.⁴⁶

What made finding out about the training of conductors more difficult was Dr Hari's (former

⁴⁶ Personal comment to the researcher.

Director of the Pető Institute) fear of losing "her" conductors to other countries and her anxiety that once conductor training became "demystified" then rival training establishments would be set up and the Pető Institute would lose its pre-eminence in the world. There has also been the suggestion that the Hungarian government saw the flood of foreigners from around the world as a good commercial operation and therefore everything to do with conductive education was considered "commercially sensitive".

In spite of the secrecy, some information has been published in English that outlines the kind of training conductors receive (*see* Appendix B).

An Hungarian Alternative to the András Pető Institute

There are 2 developments coming out of Hungary that warrant the attention of anyone contemplating conductive education training courses. The International Pető Institute has been established to receive funds internationally from 1993 and to offer a 4-year conductor training course for foreigners.

One of the largest private training establishments in Hungary is the MOIRA Institute for Conductive Education. Under its director, Agnes Borbely, the Institute's "General Information" hand out openly solicits consultancies, provides screening assessments, and conducts lectures and courses for Hungarian and foreign experts.⁴⁷ Further, it has established short courses for professionals and consultancies to special schools in the United Kingdom, arranged a summer school in Leeds in 1991, and is planning a number of English-language books on conductive education.⁴⁸

MOIRA also offers students of conductive education 2 end-on courses of 3 weeks each, the first for beginners and the second for advanced students. The first course covers the principles of sciences closely connected with conductive education and an introduction to conductive education. The second course comprises 15 lectures on conductive education (operative observation, planning, and follow-up), together with the opportunity to apply theory to practice as "second" or "first" conductors in conductive groups under the direction of qualified conductors.

Recently, information has come to hand which indicates that Kecskemet and the Foundation for Conductive Education (UK) are proposing to collaborate in setting up pre- and post-graduate modular diploma courses at Kecskemet. These courses would be open to anyone in the world, and already there is an expression of interest from Andrew Sutton, Director of the Foundation for Conductive Education (UK), who appears keen to enter into a relationship with MOIRA to provide the United Kingdom Hungarian-trained conductors with the opportunity to add to their undergraduate qualifications in Hungary. In spite of this interest and encouragement aimed at MOIRA, Sutton is also exploring the possibility of training conductors in England at the Universities of Warwick and Wolverhampton.⁴⁹

Given the Pető Institute's reluctance in the past to share its knowledge and practices with outsiders

⁴⁷ See MOIRA ULC brochures providing general information about the company's programmes and activities.

⁴⁸ See NACE Queensland Branch Information Kit. Undated but probably late 1992.

⁴⁹ Personal letter from Andrew Sutton to Agnes Borbely, dated 1 April 1993.

it is a welcome change to hear of other more open training institutions in Hungary that encourage collaboration with foreigners and provide, or are planning to provide, training programmes for foreign professionals.

4. Conductor Training in New Zealand

In the preliminary work leading up to this study, and then during the study itself, no one interviewed doubted the ability of Hungarian-trained conductors to effect, for some children, remarkable changes in development among those with motor disorders. They are considered by some parents to have almost magical powers, although local therapists put their high success rate down to the intensity and frequency of their group sessions. While there was no uncertainty about the professionalism and skill of conductors (acknowledging at the same time that there are degrees of skill depending usually on length of experience both working in the field and as a member of a group of conductors), there was debate about the best way to fit them into a foreign culture (New Zealand) in a way that enhances local support services (health and education). Furthermore, it helps if research backs up conductors' claims, especially among health and special education professionals, and at the moment there is very little research in this country to confirm that conductive education is a viable alternative intervention in the field of motor disorders such as cerebral palsy.

Hungarian conductors in New Zealand appear unanimous in believing that conductors cannot, at present, be trained outside the Pető Institute in Hungary. It is not just their patriotism and support of the Pető Institute that explain this belief; there are other more compelling reasons they say:

1. The long tradition of conductive education at the Pető Institute.
2. The fact that learning is treated as an apprenticeship with information and skill being handed down personally from master (teaching) conductors to trainee conductors.
3. The elusive knowledge base underpinning conductive education which we are told is documented in Hungarian but not readily available in English.
4. The institutional nature of the teaching and learning at the Pető Institute.
5. The fact that conductors work together in large groups and share their diagnoses and treatments to determine the best learning path for the motor disabled.

On the surface it appears difficult, if not impossible, to replicate the Pető Institute in New Zealand, or for that matter Australia, even if the resources in people and facilities were available. Yet something may need to be done if the supply of Pető Institute-trained conductors dries up in the near future. There is no guarantee that the present (as at 30 January 1994) 11 Hungarian conductors will stay in New Zealand, so it seems prudent to plan for the day when New Zealand has to stand on its own feet in this regard. Furthermore, if at least some of the Hungarian conductors do stay and become New Zealand citizens, in true Pető style they ought to have trainee conductors working in their programmes so that they too can pass on their knowledge and skill to a future generation just as their conductor teachers did to them.

If it were possible to set up a Pető-style 2, 3 or 4-year training programme, all spoken to agreed that the education and training ought to be as good as that offered by the Pető Institute. The point was made a number of times that there is no place for secondhand imitations or other alternatives to the real thing. What is needed is an institute very much like the Pető Institute, run by Pető-

trained conductors and providing graduate conductors for local programmes. An agreed criterion for the establishment of such an institution is that it would have to be placed within a large catchment area encompassing a wide range of motor disability cases for the trainee conductors to gain the necessary experience and knowledge.

One of the reasons for extending this study to include Victoria, Australia, was to investigate long-term plans for the education and training of conductors for Australia. In a recent report (Wagner 1993), it was indicated that there are plans for the introduction of conductor training into Australia in the future. It is difficult to say when this might be done because there are so many factors that have to be taken into consideration. If it were to happen, there is wisdom in the New Zealand Foundation for Conductive Education and NACE Australia entering into a dialogue to see if it might be possible for both countries to collaborate in running such a course, perhaps with in-country placements under the direction of master conductors.

Just how long trainees would have to spend working in a central institute, and what their training would comprise, would need careful deliberation, taking into consideration not only principles and practices of conductive education but also national standards and the status of this kind of undergraduate degree within the national qualifications framework in Australia and New Zealand. It is not expected, given the close working relationships between Australia's National Training Board and the New Zealand Qualifications Authority, that cross-crediting between the 2 countries would be a problem now that a bilateral working party has recommended the harmonisation of education and training in both countries (see Kearns, *et al.*, 1993).

Assuming that the education and training of conductors is realised in Australasia in the near future, the curriculum for a degree course will be of considerable importance to all. The curriculum plan would have to adhere as closely as possible to the curriculum outline of the Pető Institute in Appendix B, and there would need to be a residential institutional setting where the trainees would be able to work in a teaching/learning environment that gave due, if not equal, emphasis to the application of theory to practice. Finally, trainee conductors would need to have constant access to a range of conductive education groups where highly skilled master conductors were practising their craft. This way trainee conductors would be exposed to the best examples of teaching in the traditions of conductive education.

In developing this curriculum, the support and assistance of experienced master conductors would be necessary to identify the competencies required of the graduate conductor trainee. Their assistance would be required both to develop these skills into a coherent plan for training the undergraduates and to undertake the examining and assessment of graduation standards in the classroom. Without their support and assistance it would not be possible to initiate and develop a course to suit New Zealand conditions and culture. It would be possible, however, to adapt a conductive education curriculum for an Anglo-American culture as long as it was recognised that this was always going to be an adaptation and not a curriculum grounded in Hungarian conditions and culture.

In sum, it is possible to train conductors outside the Pető Institute, as has been demonstrated recently by rival training providers in Hungary. We have seen evidence that conductive education institutes have been set up in the United Kingdom, Austria, Israel, and Hong Kong. Although these institutions have in the past relied on training their staff in Hungary, some are now considering other alternatives given the difficulties and costs associated with working with the Pető Institute. Provided they have the same kinds of facilities as those at the Pető Institute, sufficient support

personnel, and the type of conductor expertise available in Hungary, there is no valid reason why training conductive educators should not be undertaken in Australasia in the future. To reiterate, success in this respect will largely depend upon the support of a core of New Zealand and/or Australian-based conductors.

Vacation Workshops

The advent of conductor education training is some way off at the present time and yet there is a discernible need for the current New Zealand-based Hungarian conductors to meet and share experiences as they would do if they were working in the Pető Institute. A measure that would meet this need and, at the same time, lay the groundwork for introducing conductor education training into New Zealand is for the New Zealand Foundation for Conductive Education to run residential vacation workshops. An ideal venue would be the Child Potential Unit at Rotorua which has 24 residential beds, excellent facilities and equipment, and closes down its own programme during holiday periods when workshops could be run.

A major advantage of running residential vacation workshops is that parents and children who do not have access to a conductive education programmes would be able to benefit from an intensive programme at least for a short time. A second advantage is that a number of conductors could come together to pool their collective wisdom and hone up their skills in dealing with children in their programmes. A third advantage is that such workshops provide a training ground for developing ways to train support staff and ultimately trainee conductors. In sum, vacation workshops are an effective way to provide rural parents and children with an opportunity to experience a conductive education programme, and at the same time up-skill conductors through peer review and evaluation.

Vacation workshops could not function without the support and participation of conductors. Programme coordinator/managers would have to ensure that conductors were not overloaded nor their holidays comprised. It is expected that conductors' conditions of employment will eventually include vacation workshops as part of their job requirement. Not all conductors would be able to assist in the running of vacation workshops but for those working alone, or wishing to expand their experience through peer discussion and evaluation, vacation workshops as suggested above would seem to appeal.

The idea of vacation workshops appeals to conductors although they would like longer courses spanning a minimum of at least two months to effect their programmes of practical training.⁵⁰ Working together in a "hostel-style" course would give the most experienced conductors an opportunity to examine the work patterns of the other conductors and thereby execute a quality assurance agenda which would, in due course, have ramifications for the standard of conducting throughout New Zealand.

5. Postgraduate Courses in the Principles of Conductive Education

Postgraduate courses for those working in the field of conductive education appeal to policy planners such as Andrew Sutton of the Foundation for Conductive Education (UK). He is keen to find a source of relevant inservice training opportunities for English conductors who did their conductive education training in Hungary. Although he does not mention it in a recent letter

⁵⁰ Communication from Gábor Fellner to writer received on 28 February 1994.

already referred to in a previous section, one gets the impression that he is pleased that qualified people both in England and around the world believe they ought to have the opportunity to learn more about conductive education. In fact he recommends to Agnes Borbely of MOIRA that, while their first priority ought to be the "creation of Hungarian training with a firm academic and practical base", the second priority ought to be the creation of postgraduate courses.⁵¹

Andrew Sutton explains that prioritising the creation of post-graduate courses for Hungarians and foreigners "may seem paradoxical to come first but it seems a vital part of assembling a necessary academic corpus". International acceptability and professional credibility are important considerations in Sutton's view and are dependent upon the degree of recognition accorded by foreign governments. A respectable university-based qualification has considerable currency value in any developed country as long as it is realised that each country will want to "create and specify *their own* teaching qualifications".⁵² There is no better example of this than in Victoria, Australia.

In response to pressures from parents and specialists a wide range of training and inservice initiatives has been developed in Australia, particularly in Queensland and Victoria where it has been reported⁵³ that specialists have on a voluntary basis facilitated seminars, lectures, and workshops for those interested in learning about the principles of conductive education. The Spastic Society of Victoria has run a 5-day "Introductory Course to Principles of Conductive Education".

Discussions between NACE Victoria and NACE Queensland officials and their counterparts at the local universities have indicated an interest by the latter in providing postgraduate training involving input on conductive education.

Already the following accredited courses include a unit on conductive education:

- Postgraduate Paediatric Physiotherapy Course, University of Queensland
- Physiotherapy Course, University of Queensland
- Disability Studies Course, Burwood Campus, Monash University
- Postgraduate Special Education Course, Burwood Campus, Monash University⁵⁴

In 1993 the University of Melbourne offered a 100-hour certificate course at the Institute of Early Childhood Education in the principles of conductive education. There are plans to develop this course into an accredited postgraduate 2-year diploma course over the next 5 years.⁵⁵

The University of Melbourne

The background to the creation of the University of Melbourne's "Graduate Certificate in Motor Disabilities in Young Children: Applying the Principles of Conductive Education" is given in Wagner (1993). The course has completed its first year and is meeting the needs of specialists in the

⁵¹ Personal letter from Andrew Sutton to Agnes Borbely, dated 1 April 1993, p.4.

⁵² Ibid., p.2.

⁵³ NACE Queensland Information Booklet.

⁵⁴ Ibid.

⁵⁵ Wagner (1993) op.cit.

field who require both theoretical background and some practice in the principles of conductive education.⁵⁶ Because this course will appeal to specialists in New Zealand who currently have no academic forums in which to discuss theoretical and practical aspects of conductive education, a brief outline of the University of Melbourne course is given in Appendix C.

As mentioned in Wagner (1993) this course was developed at the University of Melbourne's Early Childhood Development Unit in collaboration with NACE (Victoria) and is seen as a precursor to a postgraduate diploma and, in the future, to an undergraduate degree. NACE (Victoria) hope that in due course it may be possible to train conductors in Australia. Although they are uncertain how this will happen, they feel sure something must be done to meet the growing demand for conductors in Australia.⁵⁷

Future Postgraduate Courses Involving Conductive Education

Conductive education is comparatively new entrant into the New Zealand education and health systems. In the field of special education (not early childhood special education) a needs analysis has been undertaken by the SES under contract to NZQA for the development of unit standards. Those unit standards will then be packaged to provide qualification of various types for the range of occupations within the area of special education. This task, with respect to conductive education, is much greater because of its short life to date and a dearth of relevant written course work and training materials. The SES believes that the New Zealand Foundation for Conductive Education needs to decide what training it wants for conductors and others working within conductive education programmes (i.e., through a needs analysis) and then seek a contract with NZQA to develop the appropriate unit standards.

A complicating factor is that the education community is currently seeking to establish an ITO (Industry Training Organisation) which in the longer term would take over the responsibilities for overseeing unit standard development from NZQA. Funding for ITOs is available from the Education and Training Support Agency (ETSA). However, organisations belonging to an ITO are expected to also provide funding themselves and to eventually become financially self-sufficient (presumably a Health sector ITO will eventually be set up also).

In conductive education circles there has been discussion about the kinds of post-graduate courses that ought to be provided by the Foundation. It has been argued that it might be more appropriate to concentrate on providing a Certificate in Conductive Education (Level 5 on the National Qualifications Framework) for early childhood educators and primary school teachers rather than for traditional therapists (e.g., occupational therapists, physiotherapists, and speech language therapists).⁵⁸ However, this study demonstrates that 29 specialists, mainly therapists (but including early childhood workers as well) from around the country included about two-thirds who would like more information about conductive education. They indicated too they would like to know more about the theory and practice of conductive education, both within the context of the programmes

⁵⁶ See Graham Wagner (1993), *op cit.*

⁵⁷ *Ibid.*

⁵⁸ A comment made in the Notes of Meeting of the Research Advisory Committee on 2 November 1993.

and as part of their own professional development.

Occupational therapists and physiotherapists in this study were split on the issue of the kind of postgraduate training they needed, with a minority (N=9) opting for neurodevelopmental courses which meant more advanced training in their own disciplines. Most of those interviewed seemed to be unaware of the more formal courses offered by Otago Polytechnic and Auckland Institute of Technology at the Advanced Diploma levels. Nor were they aware of recent moves by the Physiotherapy School in Dunedin which has run in-service courses for therapists, or of in-service courses in education and health run by the Auckland College of Education and the Auckland Institute of Technology.⁵⁹ These findings emphasise the need for all therapist (and for that matter medical) undergraduate courses to contain a paper, or a section at least, on alternative therapies, including conductive education.⁶⁰

In spite of the above postgraduate offerings by training providers it is unlikely that neurodevelopmental courses would devote much time to conductive education. Therapy specialists in this study all expressed a keen desire to build upon their own undergraduate training, but given the short time that would be allotted to alternative therapies (i.e., life-style approach in the case of conductive education) conductive education may still remain a relatively unknown quantity in traditional training programmes.

The above comments and findings suggest a need for a more specific course of post-graduate training for therapists and teachers interested in learning more about conductive education within the context of their own professional development. For example, it would not be inappropriate, given the results above, to seriously consider the following options for specialists operating in the field of conductive education:

- Diploma in Conductive Education (for ECE or Primary teachers) - 1 year course undertaken after the Diploma in Teaching; or
- Diploma in Conductive Education (for therapists) - 1 year course undertaken after the completion of undergraduate training for Speech Language Therapists, Occupational Therapists, or Physiotherapists.

There is no reason why these two courses (specifically aimed at Level 7 on the Qualifications Framework) could not be combined as they have done at Melbourne University. The content of such a combined course could be based on the identified training needs cited above (see the Results section) and the curriculum outline for the postgraduate certificate course offered by the University of Melbourne (Appendix C).

The conductors' representative on the Advisory Committee for this study went to some pains to point out that if New Zealand were to follow the University of Melbourne model for post-graduate studies more time ought to be given to practical studies because this is fundamental to the whole nature of teaching and learning in conductive education programmes. In addition, he said, there ought to be the opportunity for students to experience a daily practical group work schedule, over

⁵⁹ Note by Pam Croxford to the researcher.

⁶⁰ A point made by the Advisory Committee for this study at a meeting held in NZCCS Headquarters meeting room on 7 February 1994.

an extended period, so that they might appreciate the multidisciplinary "life style" approach of teaching and learning so typical of conductive education.⁶¹

That being so the new University of Melbourne course appeared to meet with approval from those wishing to see some form of professional training for specialists in New Zealand. In general terms, it could be said that those contacted in this study accepted the University of Melbourne course as a viable first step model for those wishing to replicate it in New Zealand. There were no clear ideas of who might offer this training or where it might be done.

Summary

The "Results" section has summarised the data arising from interviews, visits, and data analyses dealing with training. The next section, "Discussion", takes up these matters and outlines how the development of courses at the 3 identified levels of training might be provided, then examines some of the more controversial issues that have the potential to diminish efforts to deal with the training needs identified in this study, and concludes with brief word on future actions.

⁶¹ Communication from Gábor Fellner dated 28 February 1994.

DISCUSSION

Once it has been established that there are training needs, and at what level of the NZQA Framework, one needs to know what procedures to follow in registering interest in a national curriculum plan and what methods to use in developing that plan. This section addresses these 2 matters, then ranges over issues that could depreciate any training initiatives in the near future.

1. Developing Curricula for Conductive Education

Having established that there is a need for training people involved in conductive education at the different levels, the next step is to determine what curriculum development procedure to follow and who might provide the training. As there are 3 levels of identified training needs (short courses, undergraduate courses, and postgraduate courses), it was necessary to consult with the New Zealand Qualifications Authority to see how the training might be integrated into the Qualifications Framework. A preliminary meeting was held with NZQA and much of what follows came out of that meeting.⁶²

If conductive education programmes are licensed by the Ministry of Education as early childhood education centres then they can apply to NZQA to become Private Training Establishments (PTE) and seek accreditation from NZQA as a training provider of a package of unit standards in which they are considered to have competence as trainers. It is not mandatory to obtain NZQA approval for local courses but seeking approval first ensures participants on approved courses can obtain credit for unit standards included on the Framework. If the training required by staff working in conductive education programmes is not available within a programme there are many opportunities to seek such training (if it is available) and accumulate credits from locally-based tertiary training institutions, such as SES and ECDU. In most cases it is a matter of balancing needs against what is currently being offered. In other words, it is a matter of balancing the academic and managerial demands in any curriculum with what is available in the training provider community surrounding the programme.

2. The Role of NZQA in Course Approval and Provider Accreditation

In outlining the procedures to follow, NZQA made some useful observations about curriculums involving traditional therapies. There are huge overlaps in content and practice in the health sciences (the most obvious one is physiotherapy and occupational therapy) which require that trained professionals in practice work together in multidisciplinary teams. Approximately half the different therapy groups use team approaches to problem solving. Where conductive education differs is that its holistic approach to intervention is directed primarily through the education system rather than the health-care paradigm.

⁶² The researcher met with Ms Helen Patterson in December 1993, at NZQA Headquarters.

Because it has a different focus on health care, conductive education has come into conflict with traditional approaches to therapy, not only overseas but also in New Zealand. Ideologies influence the world views of different professionals in health sciences, just as they do of economists or politicians. Therefore when conductive education is being considered for integration into the health care system in New Zealand, its ideology (based as it is on a foreign - Hungarian - view of society) is naturally going to come into conflict with the views held by special education and health professionals.

Credibility is at the core of the clash among the different approaches; hence the crucial role of research in giving legitimacy to conductive education. As might be expected it is the *new* approach (i.e., conductive education) that has to prove it is worthy of consideration as an alternative intervention. In determining equivalency, NZQA uses all available evidence including the standing of professionals in their given field and their credibility as researchers. As mentioned in the introductory section of this report, there is now some research that appears to confirm that conductive education is at least as effective as traditional treatment approaches.

Irrespective of the validity of any new approach, NZQA pointed out that the way this approach is practised in New Zealand could work against the best interests of New Zealanders simply because of the way it is used. For example, the Pető Institute's institutional and regimented way of prescribing intervention procedures is very different from New Zealand's commitment to more liberal "open-market" approaches to education with primacy given to parental choice. Initially at least, conductive education may be seen as too rigid to fit into the New Zealand way of doing things. Once the principles of conductive education are known and appreciated, and there is evidence that it can be adapted to New Zealand conditions, much of the present suspicion about its inflexibility, and its limitations as a legitimate alternative intervention, will dissipate.

3. Co-ordination of Training in Conductive Education

NZQA is concerned with both national and local courses. National courses are of primary interest to NZQA for they have the potential to be part of the national framework and as such provide access, through cross-crediting, to other qualifications. NZQA does not have to be involved with local courses especially if a local organisation is classified as a private training establishment and is able to provide training courses under its own name. Such an organisation can set up a training programme and train people without recourse to NZQA.

This means that individual programmes could arrange their own training courses either inside the programmes or outside in conjunction with another training provider. A programme could offer short courses both to its own staff and to other interested people, while more popular courses that have application to those working in conductive education could be offered by a local training provider. If the training provider (e.g., a polytechnic) offered a local course it is usual for the provider to award certificates or diplomas under its name only. There is no guarantee that the certificate would be recognised by NZQA or be included in the Qualifications Framework. For this to happen the course must be a nationally approved course, and the training provider accredited to offer NZQA qualifications.

On the other hand, if the course were a national course then NZQA would be interested in who teaches it (who is the accredited provider) and what was taught (i.e., that the unit standards covered were on the Framework). The unit standards making up a curriculum package would need to be approved by NZQA before they were accepted onto the Qualifications Framework and approved

for crediting towards a national qualification or accepted for cross-crediting towards another approved qualification. In other words, before a national qualification can be offered the training provider must be an accredited provider and the course leading to this qualification must be approved by NZQA.

There are two possibilities for developing national courses in conductive education which have 3 identified levels of learning. Accepting that no programme is large enough, or has the necessary resources to develop a national curriculum, it remains for an agency outside the programmes to do this. Undoubtedly the agency with the most to gain from the development of conductive education in this country is the New Zealand Foundation for Conductive Education. Although the Foundation's resources are meagre, it is in a position to raise funds and to oversee the development of a national curriculum either at the undergraduate or postgraduate levels.

Other outside agencies which could do a similar job are the accredited public or private training providers. At this time in New Zealand there is no private training provider that has indicated a special interest in conductive education and in providing training for those working in conductive education. Of the public training providers, the universities, polytechnics, and colleges of education are all potential contributors to the development of a national curriculum if they could be persuaded that offering courses in conductive education would meet a clear user demand and that it would be profitable to do so. Canterbury and Auckland Universities have staff involved in conductive education research but there are no indications there, or elsewhere, that these researchers' colleagues might want to become involved in teaching about conductive education, as is the case at Melbourne University.

The general consensus in the study is that the New Zealand Foundation for Conductive Education is not only the most appropriate body to co-ordinate attempts to provide a national plan for courses of training for those working in conductive education programmes, but it is also seen to be the only body with the authority to undertake the task. Thus, it now remains for the New Zealand Foundation of Conductive Education to determine what its role might be in providing training courses that either fit into the NZQA Framework, or are required to meet the specific and perhaps local needs of the individual programmes. Once it has identified its role, the next step is to discuss any national curriculum plans with NZQA.⁶³

4. Short Courses in Conductive Education

As this study has demonstrated the resources available to each New Zealand programme are limited. Hungarian conductor-led programmes have little (and in some cases no) money for training staff, professionals, parents, and the public in the philosophy and methods of conductive education. The New Zealand Foundation for Conductive Education could assist individual programmes, first by producing a national curriculum plan for training, and second, by encouraging local programmes to undertake their own in-house training programmes. When funds become available, the Foundation could mount local, regional, or national seminars to deal with specific training needs within programmes.

In the short term, it is expected that programme coordinators/managers will have to mount their own training courses, first, because they have a responsibility to train those working in the

⁶³ The contact person is Ms Helen Patterson.

programmes (most conductors have staff development clauses built into their contracts) and, second, because there is no one else to satisfy the range of staff and parent needs identified by this study. In most cases, training required can only be provided by a conductor through on-the-job training during group sessions. As Hungarian-trained conductors are trained to provide training for either trainee conductors or parents in an on-the-job setting, and as formal presentations on academic subjects are part of a conductor's own training, it would appear as quite acceptable for conductors to be used within a programme for talks, lectures, and demonstrations.

The difficulty will be to find opportunities to provide training outside normal classroom times, although some programme co-ordinator/managers have arranged training courses for professionals and parents during mid-term/semester breaks during the year. General training needs appear not to have been catered for in most of the programmes visited. This is in some cases, an organisational problem which once identified can be dealt with by all programmes as the need arises.⁶⁴ The present study should provide the programmes with suggestions for dealing with priority training at the local level.

For those subjects where it is not necessary to have a conductor as lecturer or demonstrator, it is possible that a local training provider would be able to offer courses on aspects of conductive education and related topics. Certainly, those interested in improving their skills in management, health services, special education, and teaching can often find a range of suitable courses at the local polytechnics, universities, colleges of education, night schools, state agencies and private training providers. Although short courses can also link into national qualifications, there is nothing to prevent someone from studying a topic that interests them, or as an employment requirement, without going through with the whole study course.

In sum, each programme will need to arrange both on-the-job and off-the-job (short course) training programmes to meet the needs of its staff, specialists, parents, and the community at large. In the short term, programmes will have to look to traditional local training providers for their staff training needs if they are unable to provide that kind of training themselves. In the long term, the New Zealand Foundation for Conductive Education will probably play an increasing role in providing both educational and training materials and opportunities for all programmes. In other words the Foundation might be expected to provide or arrange short courses at the local, regional, and national level in the future.

5. Undergraduate Courses

For those wanting to make a career in conductive education there are 2 avenues. First, there is the Petö Institute course which trains qualified conductors but has been judged as too expensive for most people from the South Pacific. Second there are the traditional training courses in physiotherapy, occupational therapy, speech language therapy, early childhood education, teaching, special education teaching and similar professional courses. Some of these professionals do assist conductors as part of their work but their professional training does not make them qualified

⁶⁴ It is envisaged that the New Zealand Foundation for Conductive Education would monitor on-the-job and off-the-job local training efforts. The Foundation may also provide educational information and training materials for the programmes as its funding and co-ordination efforts expand in the future. In the meantime the programmes might be expected to look to their own resources.

conductors.

Given the future of conductive education worldwide, there is a clear need to consider the introduction of undergraduate training of conductors in New Zealand or Australia, while at the same time providing postgraduate opportunities for those in supporting professional roles. Professionals in this second group are trained for their specific profession; they require postgraduate training in conductive education especially if they wish to make a career of it. This matter is taken up elsewhere.

Although conductor training in New Zealand may not seem to be either logistically possible or economically viable, the terms of reference for this study require consideration of the possibility of its introduction in the future. This is a real possibility if one notes the worldwide expansion of conductive education, the new modular (distance education) training systems being set up in Hungary, the prospective dwindling supply of Hungarian-trained conductors, the belief that in-country training of conductors is feasible, and last, but not least, developments in Australia that point to the introduction of an undergraduate training programme for conductors in the medium-term future.

Assuming that the supply of Hungarian conductors diminishes and conductive education expands into other areas of intellectual and physical disability, there will be attempts to establish training for New Zealanders who are attracted to this form of special education. There are 3 possible avenues for training New Zealanders to be conductors.

Training overseas: The Foundation for Conductive Education in the United Kingdom sent 3 intakes of students to the Pető Institute in Hungary "at great expense". New Zealand could do the same at even greater expense. If the UK Foundation undertook its own training, as recently proposed, this would be a more appropriate option for New Zealanders, principally because of the language compatibility but the cost would still be too high for individuals without Government support (an unlikely eventuality in the present economic climate). Another option would be to take advantage of a conductor training course in Australia. But this is some years away.

While training overseas would allow New Zealand to evade the costs of acquiring a building, developing a curriculum, and running a teaching facility, there are other aspects to be considered. Cultural values embedded in teaching philosophies of overseas courses could be at variance with New Zealand's culture and social values. As our students would be expected to study a curriculum geared to another society, it is hard to see how New Zealanders could be adequately catered for in a foreign training course. In sum, New Zealanders would not "own" the curriculum, would have to study within an alien culture, and would have to deal with a foreign education and health system in their training, not to mention the high costs associated with training on the other side of the globe.

Training from overseas: The principal reason for contemplating sending New Zealanders overseas is the strong belief among some of those supporting the development of conductive education in New Zealand that we do not have the depth of experience to mount a viable undergraduate training course in this country. Therefore, linking with a Hungarian conductive education training institute such as MOIRA holds some appeal for this country, especially when such training would be a combination of local and extramural study using a modular approach to learning. The UK Foundation is investigating this option for itself as a way of getting the "so called" true Hungarian

training integrated into the United Kingdom. Certainly it would be cheaper, although still high by our standards. The same concern about not owning the curriculum would apply, but the other concerns about studying in a foreign system would be partly alleviated as the in-country work would have to be adapted to local conditions to make any practical sense. Although a compromise, it is still an expensive one; but it may be the only option for the purists who insist that only Hungarians working out of Hungary can train conductors.

Training in New Zealand: There is a school of thought outside the Pető Institute which believes that it is possible to train conductors outside the Pető Institute. This study showed that there are adherents of this belief in New Zealand, as well as those of opposing views who believe that conductors can only be trained in the Pető Institute. The reality of a dwindling pool of Hungarian-trained conductors suggests that the possibility of training in New Zealand must be considered.

Developing an undergraduate degree course requires the support of an accredited training provider such as a university, polytechnic, or college of education. Once that support has been identified, the next step is to arrange the development of a suitable curriculum through a National Standards Body or an Industry Training Organisation. As there are no suitable avenues for this step at this stage, NZQA has suggested that the New Zealand Foundation for Conductive Education act as a National Standards Body and work in conjunction with other stakeholders (i.e., SES) to develop national standards statements for an undergraduate degree (as well as postgraduate qualifications) in conductive education.

As conductive education is a small field of study in New Zealand, there are 2 obvious alternatives to providing undergraduate training in New Zealand. First, if interest in a New Zealand-style training course were strong enough, it might be more appropriate to develop an option within, say, a degree in special education. If this option were selected, the New Zealand Foundation would have to liaise closely with SES and gain its support for such a venture. Second, if numbers of trainees were small and resources limited, it might be appropriate to consider a cooperative arrangement with an Australian university such as the University of Melbourne. A joint curriculum could be developed around a modified distance education mode of instruction, with practicums undertaken in a range of New Zealand programmes for New Zealand students.

What needs to be borne in mind is that an undergraduate degree, to have any credibility, would need to be closely based on the 4-year curriculum of the Pető Institute (see Appendix B) with cross-crediting to allow for teacher or therapist undergraduate training which may reduce the length of the course to about 2 years.⁶⁵

6. Postgraduate Courses

The history of Western culture's interest in conductive education highlights the role that professionals have had in popularising this practice in countries outside Hungary. During the 1980s, and early 1990s, a number of parents and professionals went to the Pető Institute to learn about conductive education and some stayed on to study the way that it operated, eventually being persuaded that this kind of special education had something to offer in their own countries. Claire Cotter, a practising Australian occupational therapist, helped establish NACE in Australia, and in

⁶⁵ Some of the subjects in the Pető Institute's course of training (e.g., history of Hungary and so on) would be quite inappropriate for New Zealand trainees.

New Zealand, Penny Jorgensen, a parent, helped establish PACE.

While the development of conductive education in Australasia has been driven by different stakeholders (professionals in Australia and parents in New Zealand), professional involvement in the work of the programmes has led to the demand for postgraduate training courses specifically for therapists and teachers. In Australia the University of Melbourne has developed a well-attended and, by all accounts, successful postgraduate certificate for professionals wanting to study the application of the principles of conductive education to the treatment of children with motor disorders (see Appendix C).

This study has conclusively shown that the majority of professionals (i.e., specialists) in New Zealand programmes are very interested in conductive education and wish to study this intervention in more depth. Unlike their counterparts in Melbourne where there was a clear need to upgrade the skills of professionals working in holistic programmes based on the principles of conductive education, New Zealand professionals appear to want advanced professional training so they can better perform as team members working in programmes. Perhaps more importantly, they want to be accepted as full contributing members of such teams. There was also a strongly expressed need among a large minority of therapists (occupational therapists, physiotherapists, and speech language therapists) for continuing education courses and advanced training in such fields as neurodevelopmental disorders and the like.

7. Options on Training

Given the need for training at all levels of the education system, the following options are proposed:

Option 1: There is a pressing need for on-the-job, short courses for all those connected with conductive education. Recognising that programmes have a responsibility to meet the training needs of their staff, each programme administration ought to develop its own training courses based upon the data in this study.

Option 2: In addition to Option 1, programmes ought also to access off-the-job courses from an established training provider to meet many of their training needs. In this option the programmes would still have the responsibility for providing staff, parents, and other interested parties with training, but this would be contracted out.

Option 3: Because developing training curricula is a specialised activity requiring considerable resources, the New Zealand Foundation for Conductive Education ought to co-ordinate the development of both local and national courses for all those wanting to work in conductive education programmes. By collaboration with the Foundation the programmes would be better able to organise their own time and resources to work more effectively at the local level and yet, at the same time tap into a nationally co-ordinated curriculum plan, thus fulfilling their responsibility to train staff and to engage in professional development practices.

The Preferred Option: Given the complexity of developing curricula even at the local level, option 3 is the preferred choice now that the New Zealand Foundation for Conductive Education has been established. Although the Foundation would be responsible for national standards, especially at the undergraduate and post-graduate levels, it could also assist the programmes in providing short courses when the need arises. Whichever alternative is chosen, it is important for the development of conductive education in New Zealand that the ensuing curriculum plan reflects New Zealand

needs, culture, and values. Thus, "Who develops the curriculum?" and "How is the curriculum to be developed?" are the most important questions facing any professional body if a curriculum is to project the philosophy of its originators.

8. Who Develops the Curriculum?

Current thinking in New Zealand vocational education and training circles is that the respective industries or professional bodies ought to determine the competencies and skills that go to make up specific occupational qualifications. This change, supported by NZQA and the Government, is a result of a past division between industry groups and education and training providers where the former claimed that the educators did not adequately prepare trainees for the "real" world of work and the latter claimed that the industry did not know what it needed. Now, under new rules and regulations governing the specification of unit standards for national courses, it is the industry or professionals who determine what the training providers teach.

It is important that those people promoting the development of conductive education be in a position to say what a conductive education curriculum should contain. In other words "ownership" of the curriculum should be in the hands of those who have the most to gain from it - parents, conductors, and professionals involved in programme work.

The body set up to co-ordinate the promotion of conductive education and to deal with matters of national interest is the New Zealand Foundation for Conductive Education. Therefore one could assume that the Foundation would arrange the funding to develop a national curriculum, decide on the appropriate curriculum model, negotiate funding with NZQA, commission a facilitator for the group work required to identify the competencies and skills underpinning a competency-based curriculum,⁶⁶ collaborate with training providers on ways to implement the curriculum and publicise the curriculum where necessary. The Foundation would not only decide "who" developed the curriculum but solve the ownership issue by ascertaining "how" it was developed. To do this properly the "right" model for curriculum development must be selected.

9. Selecting the "Right" Model for Curriculum Development

How the curriculum is developed is as important as who develops it, because the developmental process has considerable bearing on the nature of the curriculum and how it is used by training providers. What follows is based on work done in Canada and the United States on developing curricula for Newstart adult education courses. The emphasis in North America was, and still is, on "front-end analysis". In other words, it is assumed that those who work with and supervise the work of graduates out on the job are in the best position to say what the workers need to be able to do (the competencies and skills they require) to undertake the wide range of activities facing them in their day-to-day work.

Once the competencies and skills have been identified, it is possible to determine the nature of the learning outcomes and the standards of performance required to achieve mastery of the training, whatever that might entail. Curriculum development in this scenario is no hit-and-miss affair; it is

⁶⁶ The current widespread practice among ITOs and NSBs of arranging for one person (supposedly an expert in the subject area) to write the unit standards for a national qualification is so inferior to using a team of experts, under the direction of a curriculum specialist, to undertake a focus group analysis of the occupational area, that it is dismissed from serious contention in this study.

a complex procedure which takes into account all integrating factors from the culture in which the training takes place to the most rudimentary task sequence. Since conductive education is itself a whole system of learning, the following "systems approach" is considered an appropriate and valid model for a system of education based on a holistic approach to learning.

10. Needs-based Training⁶⁷

It has become commonplace nowadays to develop needs-based training programmes. What this means is that an instructional programme is developed from an occupational analysis down to the specific competencies and skills for a particular job. Undertaking a skills audit in an occupational area will also show up training gaps, or in other words those skills that are needed on the job but for which there is no training.

In modern approaches to needs-based vocational curriculum development, there is the built in assurance that there will be nothing in the training programme that is superfluous or has been missed from the course in the first place. Training-needs analysis (TNA) is an essential research technique designed to ensure that the competencies and skills being taught to prepare trainees for a job are relevant and comprehensive. But first, something about the theory of different curriculum models.

11. Models for Curriculum Development⁶⁸

O'Hanlon (1973) describes 3 basic curriculum development models: management, systematic, and open-access.⁶⁹ Each of these models can be described in terms of their features and chief characteristics:

A. Management Model for Curriculum Development

Features:

1. This model is most familiar of the 3 models.
2. The process follows the management hierarchy within the institution.
3. The ultimate decisions are made at the top.
4. Proposals are fed in at the teacher, supervisor, and curriculum committee levels and are screened by various levels of management.
5. Control is maintained by the administrator with final authority over the careful allocation of scarce resources.

⁶⁷ Based on a paper entitled "Occupational and Job Analyses: The Foundations of Needs-based Telecommunications Training" by Graham Wagner and presented at the Pacific Telecommunications Council's Telecom Skills Workshop entitled "Telecom Training Requirements", 12 January 1992.

⁶⁸ The information in this section has been taken from an undated handbook associated with the work of Robert E. Adams of the Nova Scotia Newstart Programme spanning the period 1972-75.

⁶⁹ O'Hanlon, J. (1973) "Three Models for the Curriculum Development Process". Curriculum Theory Network, 4, (2), 64-71.

6. Evaluation is done by subjective methods, comparing achievement to standardised test scores, collating formal comments, and following up graduates.

Chief Characteristics:

1. An instructor/administrator originates the nature of the content.
2. Resources are controlled by management to ensure that the programme of study is followed.

B. Systematic Model for Curriculum Development

Features:

1. The systematic model is goal oriented.
2. The purpose or aim of the curriculum is established first.
3. Decisions regarding its development are governed only by the purpose, hence persons other than management should (in theory) be involved.
4. The skills are carefully sequenced and each stage is evaluated in terms of whether it is furthering the original aims.
5. The guidelines for this type of curriculum are usually quite specific and are filtered, not by management, but by educational philosophy and psychology.
6. Control is maintained by adherence to the original purpose and guidelines derived from that purpose.
7. Resources are only allocated on the grounds that they help achieve the stated learning goals.
8. Evaluation is based on the same principle, with feed forward and feedback from each successive stage used for checking.

Chief Characteristics:

1. Its goal or purpose-oriented character.
2. The need for involvement from many areas of the community, and the institution, to achieve the stated goal.

C. Open-access Model for Curriculum Development

Features:

1. The open-access model is based upon humanist tradition in philosophy.
2. Decisions are made with respect to their compatibility with the original humanist rationale.
3. Discourse, openness, and discussion are the methods used.
4. Decentralisation of decision making results from openness to all ideas.
5. A decision can be reconsidered at any time and no preconceived plan is required before an idea is implemented.
6. After due consideration, statements are formulated which act as guides for those who are responsible for developing and constructing learning experiences.
7. The process is one of continuous experiment.
8. Evaluation is in terms of the humanistic rationale which was judged significant in terms of humanistic values.

Chief Characteristics:

1. Its humanistic approach.
2. Its openness to interpretation based on considered human values.
3. Control of the process is assumed within the framework of rationality and collective interpretations of changing human needs.

12. Which Model?

William Blake is credited with saying "I must create a system or be enslaved by another man's". The management model produces a curriculum system designed by people in power who appear more concerned about institutional needs than trainee needs. It is the traditional model in vocational education and is truly an imposed system which gives the teachers and learners very little opportunity to affect the developmental process. It is the "imposed" system that Blake feared.

The open-access model is diametrically opposed to the management model. The humanistic view sees the curriculum process itself as fluid, with its control very much in the hands of the people involved in the teaching and learning process. Instructional-intent decisions are made by consensus and can change at any time to meet the needs of those for whom the curriculum is being designed. If the users of the curriculum want to introduce something new into the curriculum which meets their own specific needs then this is done. The ultimate skills of graduates would not be known until the final curriculum was produced, if indeed it was written down. Blake would be most confused, for he would be unable to identify either the system that was enslaving him or the form it might assume.

This leaves the systems approach model which Blake would be happy with because it is designed to establish a firm link between the job that has to be done and the actual training required to bridge the training gap. The systems model has the ability to adjust to compensate for changes in the job or the training so that the graduate still acquires the requisite skills. This model does have some problems which need to be addressed; they derive from how people perceive the systems model and its application in vocational education and training.

13. Appropriateness of the Systems Model for Curriculum Development

In an investigation into the appropriateness of the systems model in dealing with the diagnosis of training needs and the conduct of training, Atkins (1983) reports that we ought to recognise that general systems theory makes 2 basic assumptions about behavioural systems:

1. "They are open; and inputs and outputs are exchanged between them.
2. Structure and function are directly related."⁷⁰

He goes on to say that there are 4 major characteristics of any system and these are:

1. They are an assembly of components which may be abstract or concrete, and therefore systems may be 'physical' or 'philosophical'.
2. The parts are affected by being in the system and are changed if they leave it. In simple terms 'the

⁷⁰ Brian Atkins "To What Extent is a Systems Model Appropriate to the Diagnosis of Training Needs and the Conduct of Training?" in *PLET*, Vol. 20, No. 4, November 1983, pp.243-252.

whole is greater than the sum of the parts.'

3. They are not inert: they have a dynamic, they 'behave'. Their behaviour can be observed as outputs to the environment or as modifications of the system as a result of inputs from the environment.
4. They have been identified by the perceiver as being of special interest. This leads to the use of models to assist in interpreting complex phenomena.⁷¹

Atkins warns about the use of systems models by unskilled curriculum and systems developers, saying "... there is a risk that the unskilled will use the model as though it provides the right answers rather than using it as a frame of reference which orients the user towards posing the necessary and appropriate answers."⁷²

He also points out that some people may interpret systems models as "narrow, prescriptive problem-solving approaches which aim to simplify training by reducing it to logical sequential steps. This approach ... accepts the problems as defined ... without questioning the status quo."⁷³ For example, a systems model might be used to establish logical steps to training without any thought being given to the appropriateness of the training to the industry's current needs.

On the other hand, Atkins says that any training programme can be seen as part of a wider system, "... for example, an industrial organisation, a community or a social structure. This approach ... [enables] the observer to stand back and take a wider perspective of training."⁷⁴ It also implies that any change in a subsystem subtly affects the whole system, because as already mentioned "the whole system is more than the sum of its parts".

The 2 perspectives of the systems approach discussed by Atkins are not incompatible; they apply to education and training problems at different levels. The holistic approach (correctly called the "systems approach") might be applied at the training needs analysis (TNA) phase of curriculum development, when questions are asked about aims, role, ethics, appropriateness of training, and relationship between theory and practice. The problem-solving approach (correctly called the "systematic approach") can then be used for planning and running education and training courses.

Atkins concludes that "A broad systems approach is appropriate to all training, because it alerts the trainer and perhaps the trainee to the wider problems involved. A systems approach is therefore likely to lead to a realistic diagnosis of training needs."⁷⁵ Given the systems approach to curriculum development, the following question arises: What TNA research method is appropriate for a competency and skills audit of a target group in need of an industry or profession-wide curriculum plan?

14. Research Methods Often Used for Training Needs Analysis

The task of occupational analysis is complex because of the necessity to apply systematically a generic occupational analysis process to widely differing occupations. Furthermore, it is also

⁷¹ Ibid, pp.243-244.

⁷² Ibid, p.245.

⁷³ Ibid., p.245.

⁷⁴ Ibid, p.245.

⁷⁵ Ibid, p.250.

necessary to select and utilise an appropriate technique for each occupation under study. What makes this process even more complex is that there is no single technique that suits all occasions⁷⁶ although there have been misguided attempts in New Zealand to promote one technique above all others⁷⁷.

All data-gathering techniques employed in occupational analysis, assist the researcher in collecting crucial data although they each have their strengths and weaknesses. The 2 methods recently used by the New Zealand Council for Educational Research are:

1. Individual interviews and questionnaire surveys, validated by observations; and
2. Group process methods based on front-end analysis.

Interviews and Questionnaire Surveys

In undertaking an occupational analysis of the electrical, electronic and computer engineering occupations NZCER has used individual interview schedules and questionnaires with job holders, their immediate supervisors, and managers.⁷⁸ From an in-depth analysis of what these individuals said about their jobs, it was possible to provide evidence about the skills and tasks required to do the jobs, and to determine whether the well-known job titles and descriptions still characterise the incumbents' jobs. For example, once the job incumbent has provided the researcher with a job description, exemplar questions in this section are:

- What do you do when you do each task?
- What do you need to know to do each task?
- What are the standards of performance for each task?
- What equipment do you use?
- Were you trained for each task?
- Do you need more training for each task?
- What do you like about your present job?
- What do you dislike about your present job?

Other sections in the interview schedule and questionnaire cover a job holder's background and training, as well as career development.

From the assembled interviews and questionnaires the researcher is able to determine whether there are any training gaps, where these are, and how they might be addressed. One disadvantage of this technique is that the researcher has to take the respondents explanation of what they do which may not always be accurate. To overcome this disadvantage observational methods are used

⁷⁶ Ian D. Livingstone, "A Researcher's Viewpoint", in *Towards Competency Seminar* edited by Graham A. Wagner (NZCER: Wellington) August 1988.

⁷⁷ See the paper by Graham Wagner (1991) entitled "Curriculum Development and Course Design in Vocational Education". A paper presented at the APNZ Seminar on *Course Design, Approval and Accreditation*, at Whitireia Community Polytechnic, 3-4 September.

⁷⁸ This same method has been used across different occupations (see G A Wagner *Electronic Data Processing - Report on Training*, VTC: Wellington, 1984).

to confirm that the job requirements are as stated by the respondent.

Nevertheless, it is hard for the researcher to acquire an objective overview of the job skills except through individual (subjective) perspectives. Even validation through observation relies upon observer neutrality and circumspection and a high degree of objectivity which is suspect given the nature of the data-collecting methods. Yet, in the final analysis it is the costly nature of one-to-one interviewing, surveying and attendant observation, that makes this method difficult to justify on cost-effective grounds in most cases.

15. Group Process Data-Gathering Methods

Cheaper, objective, and more comprehensive methods of occupational analysis are group process methods. There are a number of well-known group process methods for conducting curriculum research which are available to the researcher. These data-gathering methods can be grouped as follows:

A. Introductory

1. Preliminary investigation
2. Exploratory research

B. Structured "Brainstorming"

3. Delphi technique
4. Nominal group technique
5. DACUM approach
6. Search conference

C. Others

7. Critical incident technique
8. Force field analysis

Each of these methods has its advantages and disadvantages and no one method is suitable for all occasions.⁷⁹ Table 1 demonstrates that the research questions being asked determine the kind(s) of method(s) that should be used in group process curriculum research.

⁷⁹ Livingstone, op. cit.

Table 1: *Questions Which Guide Selection of So-called 'Fast-Response' Curriculum Research Methods*⁸⁰

Key Question	Curriculum Research Method
What information is available and has a bearing on curriculum development in the area?	Preliminary investigation
Is it desirable to describe the general field to be covered and to identify the main elements in this field and their interrelationships?	Exploratory research
Is the occupation undergoing substantial change?	Exploratory research The Delphi technique The Search conference
Is the occupation relatively stable?	DACUM (or derivatives)
Is there group tension about the direction a curriculum review should take?	The search conference Nominal group technique (possibly force field analysis)
Is urgent information needed about the critical knowledge needed to perform specific work functions?	Critical incident technique

Given the above selection, it should be mentioned that often the model best suited to developing a new curriculum outline plan uses not one model but a combination of the above models. A recent curriculum research study by NZCER included 3 separate research methods leading to a complete competency and skills audits. The first method included a preliminary investigation, which is covered in the feasibility section of an NZCER study and proposal.⁸¹ The second method included a future scan (a technique used in search conferences which covers the past, present, and future of

⁸⁰ This table is an adaptation of a similar one in Anderson and Jones *TAFE Curriculum Research: A Review of Group Process Methods*, (TAFE National Centre for Research and Development: Adelaide), 1986, p.6.

⁸¹ "National Curriculum for Rest Homes Staff: A Feasibility Study and Research Proposal" written by G A Wagner, NZCER, December 1989.

the occupation as seen by the TNA Workshop group).⁸² Finally, the third method used at the TNA Workshop was a derivative of the DACUM method.⁸³

Essentially, as in any group process method of this type, the facilitator of a TNA workshop has the task of expediting the definition of competencies and skills by analysing the whole occupation from the most basic of duties right through to the highest position in the occupation. To accomplish this, the group process method now commonly used is a multi-method approach, the technique used by NZCER to develop competencies and skills development profiles in a number of health science professions over the last 12 years.⁸⁴

To summarise, when selecting a curriculum development method, care should be taken to see that the ownership of the curriculum remains in the hands of the industry or professional body responsible for the trainees. To ensure that this happens, those commissioning a curriculum plan is conductive education should choose a method of curriculum development that is holistic and in keeping with the theory and practice of conductive education. In addition, the curriculum facilitator must be able to elicit quickly and economically from specialists and practitioners the competencies and skills that represent the qualifications being developed. The systematic model employing a multi-method group process for data collection and validation are the recommended approaches for curriculum development in the field of conductive education in New Zealand.

⁸² A copy of the future scan, which was used by the TNA workshop group to take into consideration trends and developments in the caregiver occupation, was included in the second draft of the national curriculum. It was dropped from the final version of the curriculum because it was essentially an orientation method for TNA workshop participants and was widely misunderstood by those reviewing the curriculum. Nevertheless, it is as important as the competencies and skills chart and should be updated during reviews of any new curriculum or at least every 3-5 years.

⁸³ Collectively all 3 methods make up what Livingstone (op.cit.) called the multi-method approach to group process curriculum research. The combination of methods in the National Rest Home project was designed to overcome the disadvantages inherent in using any one single method.

⁸⁴ Health science occupational groups that NZCER has been involved with are dietitians, hospital-based nurses, physiotherapists, rest home care-givers, medical laboratory technologist, medical laboratory assistants, and Fiji nutritionists and dietitians.

OTHER ISSUES

During this study a number of important issues recurred which appeared to influence an adaptive conductive education programme's ability to mount training initiatives. These are outlined as follows.

1. Cultural Adaptation

It is no easy matter to leave one's homeland and settle and teach in another culture, especially if one's command of the indigenous language is non-existent or marginal. Careful steps have to be taken to ensure that immigrants settle down and adjust to the new culture with the minimum of conflict and stress. There is inevitably an adjustment period that can be lessened through the judicious use of training or orientation programmes. This study indicated that, while the material comforts provided for Hungarian conductors were generally extremely favourable, the matter of adjustment to the New Zealand way of doing things was left very much in individual hands.

It is appropriate to ask whether such adjustment could have been eased by requiring conductors to attend orientation courses on arrival, for example, in English as a Second Language. This would need the co-operation of the conductors which should not be a problem, given their understanding of structured, sequenced, and reinforced learning patterns for mastery of any task, including language. Once the language had been functionally mastered, communication during programme work would have been facilitated at a greater pace than it has been to date.

There have been barriers to communication in all the programmes visited. Criticisms that the conductors are aloof, or do not appreciate the parents' point of view arise from misunderstandings over words and concepts. There are cultural differences in the way New Zealanders and Hungarians think about culture, society, and work relationships. Some of the difficulties associated with specialists and their support role relate more to communication barriers than to professional differences, although these do exist. Notwithstanding these communication problems, there is a positive spirit permeating all the programmes in New Zealand, whether they be adaptive or alternative, which bodes well for the future. It is hoped that data presented in this study will contribute to improve communication and understanding and break down cultural barriers.

2. The Salary Relativity Problem

The biggest question facing those running the programmes is "What should we pay our conductor(s)?" In the past there was no standard, and being a scarce commodity conductors could virtually determine their own remuneration packages. Administrators have often been prepared to pay or raise excessively large sums just to have a conductor on the payroll. Some conductors exploited this situation and demanded higher than reasonable rates, knowing that they could go elsewhere if they did not get what they were asking. Fortunately for conductive education in New Zealand, the New Zealand Foundation for Conductive Education has stepped in and is now recommending the standardisation of contracts, salary scales, and conditions of service, including

the provision for staff development and training.

There is, however, still a perceived imbalance between the salary range for conductors and their closest equivalents in the health and education sectors. This study determined that conductors, depending on their experience, might reasonably be paid on a scale ranging from \$35,000 to \$50,000. When this recommended range is compared with similar scales for New Zealand therapists and teachers there appears to be an imbalance even after length of training has been taken into consideration. The following table illustrates this graphically:

Table 2: *Salary Ranges for Conductors, Therapists and Teachers*

Salary (per annum) \$	Conductor	Therapist	Teacher ⁸⁵
52,712			Principal (G4)
50,000	Senior (Max)		
			Dep P (Top)
40,000			Ass P (Top)
		Top SLT	
	Junior (Max)		
		Charge PT	Senior (Primary)
		Charge OT	
30,000		Top PT	
		Top OT	
20,000			
			Top Sp Ed Ass

Notes:

1. This table shows current basic salary rates. It does not show contract hours, holidays' allowance, and number of support staff, although some of this information can be found in the "Results" section of this report.
2. The suggested salary scale for conductors is roughly equivalent to the scale currently used by members of the New Zealand Foundation for Conductive Education. The scales for school teachers and therapists are derived from the officially gazetted scales.

The imbalance in salary relativities has had the effect of demeaning the work of New Zealand

⁸⁵ At Carlson School, teachers' aides are paid \$8.50 or \$9.50 per hour depending on their qualifications.

therapists and teachers working in programmes and created considerable tension between conductors and specialists; in some programmes this has resulted in virtually no formal contact between the three groups. On the one hand, the conductors are said to consider that therapists and teachers are not only influenced by alien philosophies and practices but have inferior skills relating to dealing with motor disorders. The notion that New Zealand specialists can meaningfully contribute to the work of the programme is rejected, even in the area of speech language where there is an internationally acknowledged weakness in conductor education training.⁸⁶

On the other hand, the specialists interviewed for this study considered that the conductors were overpaid for what they did; this made it hard for specialists to accept conductive education as anything more than the "parents' fancy" or the "flavour of the month". When pressed, the basis for specialists' opinions on conductive education appeared to stem from the conductors' apparently inflexible approach and "seemingly" arrogant or offhand attitudes towards specialists in the New Zealand health and education systems, making it hard, and sometimes impossible, for parents to access eclectic approaches to therapy and education. That being so, the salary differential heated up this debate and was a sore point among most specialists spoken to in this study.

3. Barriers to Understanding

The aloofness attributed to conductors by a number of participants in this study may be in part a reluctance to communicate in the English language for fear of being misunderstood. However, given the number of parents and specialists who have visited the Pető Institute in Hungary and returned frustrated in their attempts to find out how and why conductive education achieves its claimed results, there also appears to be a large degree of unnecessary mystification in the work of conductors both in New Zealand and in Hungary. A strong argument exists for a meeting of the 2 parties so that conductive education, which appears to promise so much for children and adults with motor disorders (including those with multiple disabilities), can flourish within the context of New Zealand society; and within the health and education systems in particular.

The first step in bringing down the barriers between professionals in the field is to standardise the salary scale and conditions of service of conductors so that no part of the country is disadvantaged. The New Zealand Foundation for Conductive Education is already moving in this direction but it needs to go further and address the relativity issue outlined above by aligning the current de facto bench marks to take into account a conductor's experience and training, initial material needs for relocating in a foreign country, and requirements for staff development.

It is acknowledged widely in this country that staff development is an on-going activity funded jointly by the staff member, the employer, and the government. Conductors have the same upskilling needs as New Zealand specialists and therefore will need guidance and direction in fulfilling this part of their employment conditions. Yet, if most of the money raised by a programme is used to pay unreasonably high conductor salaries (and this pressure will grow now that conductors are demanding that they work in groups), there will be nothing left for the inservice training of conductors and associated support staff.

In the past, some programme trusts/foundations/societies have concentrated on raising money to bring conductors to New Zealand and have given little thought to providing adequate support personnel and facilities. Now there is a recognition that not only is there a need for adequate

⁸⁶ Both Claire Cotter and Mike Lambert confirmed this at the May 1993 workshop for conductive education.

support personnel (e.g., a full-time programme co-ordinator/manager is essential for the good management of a programme) but that all staff have training needs, programme policy makers will be better placed to offer the training so necessary for the wellbeing and reputation of a programme.

The second step in removing the barriers between conductors and New Zealanders is to dispel the mutual suspicion that exists between them. Essentially this suspicion is based upon a high degree of ignorance about what each side can bring to the task of educating children with motor disorders within the New Zealand education and health system and less so when both sides do not feel threatened by each other. Although the virtual professional isolation of a programme (as proposed by some conductors) may work in the short term, such a position would be harmful for the wellbeing and reputation of the programme in the long term. What is required is a greater degree of interaction between conductors and other professionals.

4. Building Bridges Of Understanding

Conductors need contact with the health and education professions (e.g., orthotics) if they are going to be as fully effective as they should be within the New Zealand education and health systems. To achieve this, bridges could be built between professional groups in the community through a systematic education programme at 2 levels. First, the New Zealand Foundation for Conductive Education could develop educational materials, videos, and publicity programmes to draw attention to the good work being done by conductive education programmes in New Zealand. This could be on a region-by-region basis as the need arises.

Second, each programme could run "open days" for professionals to ask the kinds of questions about the philosophy and practice of conductive education that interest them. In this case special care should be taken to ensure that either the conductor responding to questions speaks good English or a translator is available, otherwise rather than clearing up the doubts and suspicions such events will only increase the problem. Similarly, parents and support staff should have "open sessions" within a programme so that their need for information, extra training, and contributions to the overall management of the programme can be catered for. There are good videos available that could be used to "set-the-scene" when most of the audience are new to conductive education (see the "References" section of this report). In addition, there are able local professionals in most of the regional centres where conductive education is offered who could introduce and facilitate these "open days". With the full co-operation of conductors, regular "open days" should prove to be invaluable exercises in public relations if the responses to the present study are anything to go by.

5. Conductors' Workloads

Some programmes are providing in-house training but this is not as extensive as it should be when compared with such training in similar occupational groups. In some programmes it was a lack of funds, in others a lack of time that restricted training efforts. Staff development time ought to be built into all programmes as a basic requirement, as it is in related occupational fields. Conductors in particular are equated with teachers for qualification equivalency purposes, therefore it could be expected that not only should they work the same daily hours, but should also be entitled to equivalent vacation and staff development opportunities.

In one respect the work of a conductor cannot be equated to the work of a school teacher. Because of the high degree of physically demanding lifting and carrying that is part of the job of working with children and adults with motor disorders, it can be argued that a conductor works physically

harder than other educators and therefore is entitled to work shorter daily class contact hours. This notwithstanding, it has also been pointed out that conductors are paid significantly higher salaries so, while they may need to be rested more regularly (e.g., by being given less physically demanding duties such as administration), there is no reason why they should not keep the same overall hours as general teaching staff, if for no other reason than to help break down the exclusivity barrier mentioned above.

6. The Concept of "The Team"

During this study both specialists and conductors talked about working, or not working, as members of a team. It was clear to the researcher that both groups had different definitions of a team. To the specialists working in programmes, the concept "team" included the recognition of the contributions from other disciplines (multidisciplinary approach) with, in most cases, a willingness to share the responsibility for providing the services that are part of the total plan (interdisciplinary approach). For conductors who have been trained to transcend disciplinary boundaries, contributions from other disciplines were not always needed or wanted. This makes working together, either within a programme or as a visiting specialist to a programme, difficult at times.

Specialists in New Zealand are trained to work independently but collaborate with others when the need arises (e.g., a physiotherapist and an occupational therapist, or a speech language therapist with either a physiotherapist or an occupational therapist). The conductor on the other hand combines many of the skills of physiotherapist, occupational therapist, speech language therapist, early childhood educator or primary school teacher, and psychologist. This means that conductors are less likely to consult others than the New Zealand specialist who is used to consulting and working with specialists from other disciplines.

Furthermore, because of the way they were trained at the Petö Institute, where they always have a senior conductor (to make important decisions about interventions for particular children) there is not the same degree of communication and planning that New Zealand team members are used to. As one conductor explained it, "We do not need to be told what to do. We know what to do." The best way to describe the differences over the "team" concept is to explain that conductors work with other conductors in groups, each responding as expected to the loose leadership and guidance of an experienced senior conductor, while New Zealand specialists either work independently or collaborate with other specialists as part of a team.

It is only when specialists and conductors come together that a problem arises. Specialists expect that they will be a party to the drafting of a programme plan and that they will be able to use their professional training when the occasion arises. Conductors expect the specialists to do what they (the conductors) want without deviating from strictly regimented schedules and task series. Conflict has occasionally arisen between these 2 groups in some programmes when specialists have introduced their own ideas about the intervention required for a particular child and then acted to implement those ideas.

To conductors, this undermines their credibility by throwing doubt on the validity of the Petö Institute's approach to conductive education. To specialists, such a departure not only allows them the opportunity to demonstrate that they are experts in their field (in contrast to conductors who would be called generalists) but reinforces their belief that they are making a worthwhile contribution to the work of the programme as a whole. Such unfortunate scenarios can lead to ill-feeling towards conductors (and vice versa) and the work of programmes resulting in an openly

expressed desire among most conductors to work as far as possible without any input from New Zealand specialists.

Whether there is scope for compromise depends upon the management of a programme and the view the management has about the contribution of New Zealand specialists. From the outside, the differences may appear to be mainly philosophical and therefore irreconcilable, but from the few examples where the 2 groups of professionals mix and work harmoniously together the results appear worth striving for in all programmes. Conductors need to be aware that, as they are now working in the New Zealand education and health systems, New Zealand specialists have a worthwhile contribution to make and their views need to be considered. Specialists need to realise that, in a conductive education programme, the conductor determines what schedules are to be followed and what methods will be used, even if conductive education methods at times appear strange to Western eyes. Undoubtedly there must be some give-and-take on both sides.

7. "Mainstreaming"

There are conflicting messages about the value of, and the process for, mainstreaming of children with disabilities in primary and secondary schools. It is government policy to provide choice: the opportunity to enrol in mainstream schools or its special units and schools is available to parents. This "dual" system is reflected in the work of the Special Education Service (SES). During the study there were times when respondents stated that mainstreaming was neither beneficial nor acceptable to parents of children with motor disabilities, and some parents felt pressure to enrol their children in mainstream settings whether they wanted to or not. Yet, mainstreaming was regarded by other parents as the very best thing that could have happened to their child.

Mainstreaming of children from conductive education programmes involves a team decision including conductors, SES staff, and the parents. Parents are usually advised that enrolling in regular schools can be of benefit to children with motor disabilities. But the decision about what form this enrolment takes - whether it be complete integration or partial integration into normal school activities - depends very much on what special education resources are available in the school district. Naturally, the particular needs of the child, and his or her ability to benefit from regular educational settings are important considerations. It should not be lost sight of that the needs of the child should remain a paramount consideration in this decision.

The New Zealand Foundation for Conductive Education could investigate what options parents have and produce information about how these options might be taken up. There is a surprising degree of ignorance among parents of children with motor disabilities about what options they have available to them, not only in therapeutic treatments but also in special education services. What is needed at this moment is a brochure outlining options for parents when their child is being considered for regular education. This proposed brochure, ideally produced by the Foundation for the whole of New Zealand, might best be structured around key questions and answers. Such an educational aid would provide parents with viable, rational choices at a time when there is a dearth of this kind of comprehensive information.

8. Membership of the New Zealand Foundation for Conductive Education

The National Working Party on Conductive Education has involved all those people who have an interest in conductive education, be they from adaptive-type programmes employing full-time Hungarian conductors or alternative-type programmes with a multidisciplinary team using the

principles of conductive education. The New Zealand Foundation for Conductive Education (a Trust Board), which will now take over the work of the National Working Party, has restricted full membership to those service providers who employ at least one "... certified trained conductor". Associate membership is by invitation to "... any person ... provided such an associate member shall have no right to vote at any meeting of the Trust". Membership appears to discriminate against the alternative programmes which have no institutional membership or recognised partnership in the Foundation.

The alternative programmes have a role to play in the future development of conductive education in New Zealand just as they have had in the past. Continued contact with those working in adaptive programmes would appear to be a necessary condition for staff in alternative programmes if the practice of conductive education is to be as widely promoted throughout the country as the Foundation's objects suggest. It could be argued that the alternative programmes also offer staff in adaptive programmes the opportunity to explore a wider range of approaches to conductive education, without departing too much from the broad parameters of the discipline. Because of the mutual benefits so perceived, there is the need for continued contact through a collaborative working group, such as the National Working Party used to provide, where all members have an equal say in decision making. As presently constituted, the Foundation does not provide that kind of necessary forum.

FUTURE ACTIONS

Is a National Curriculum Feasible?

This study has identified a long list of training needs from those currently working in or around conductive education programmes in New Zealand. Some of those needs can be met through the limited resources of the programmes themselves, but the more complex needs require the provision of training from an approved training establishment. At the heart of any national, or for that matter local, initiative for recognised training lies the necessity for a plan of action - a curriculum plan. With New Zealand undergoing changes in the provision of vocational education and training, and with no specific group among established stakeholders in special education possessing sufficient expertise in conductive education to take up the issue, development of a national curriculum that could also address local training needs falls back upon the interested parties - the conductive education programmes - as represented by the New Zealand Foundation for Conductive Education.

Nothing was discovered during this study to suggest that a national curriculum is not a feasible venture now that the New Zealand Foundation for Conductive Education has been established. It is the kind of venture that the Foundation was set up to oversee, if not to undertake itself of the 3 levels of training identified as necessary components of a national curriculum, it can be established that there is a priority order for dealing with course development:

- | | | |
|-----------------|---|----------------------|
| First priority | - | short courses |
| Second priority | - | postgraduate courses |
| Third priority | - | undergraduate course |

While this priority order is related to available resources and other pressing needs, it reflects the complexity of developing diploma and degree programmes in the professional area. It also indicates the caution being expressed by a wide range of people involved with conductive education that full conductor training in this country is some way down the track. Nevertheless, there were clear signals that this development ought to be planned for and could be included in a national curriculum, at least in outline form. If these priorities are accepted, then it is feasible for the New Zealand Foundation for Conductive Education to develop a curriculum plan based on the findings in this study, taking into account developments overseas.

Where to Next?

Given the complexity and cost of introducing a national conductive education training curriculum into New Zealand, it makes sense to hand the task of co-ordinating the development of a national curriculum to the New Zealand Foundation for Conductive Education. In addition, because the curriculum needs to include what is going on within the programmes, it is suggested here that the New Zealand Foundation should include all levels of training from short courses to postgraduate. In this way a curriculum plan can be laid down which best meets the short- and long-term needs of

a small country with limited resources. Further, such a comprehensive plan ensures that the energies and resources of individual programmes are not extended beyond what they are responsible for at the moment.

As to what to do next, Figure 2 demonstrates that this feasibility study fits comfortably into the R&D model whether or not all levels are included in the curriculum plan. This study shows that Section 1 has now been completed and Section 2 is the next step.

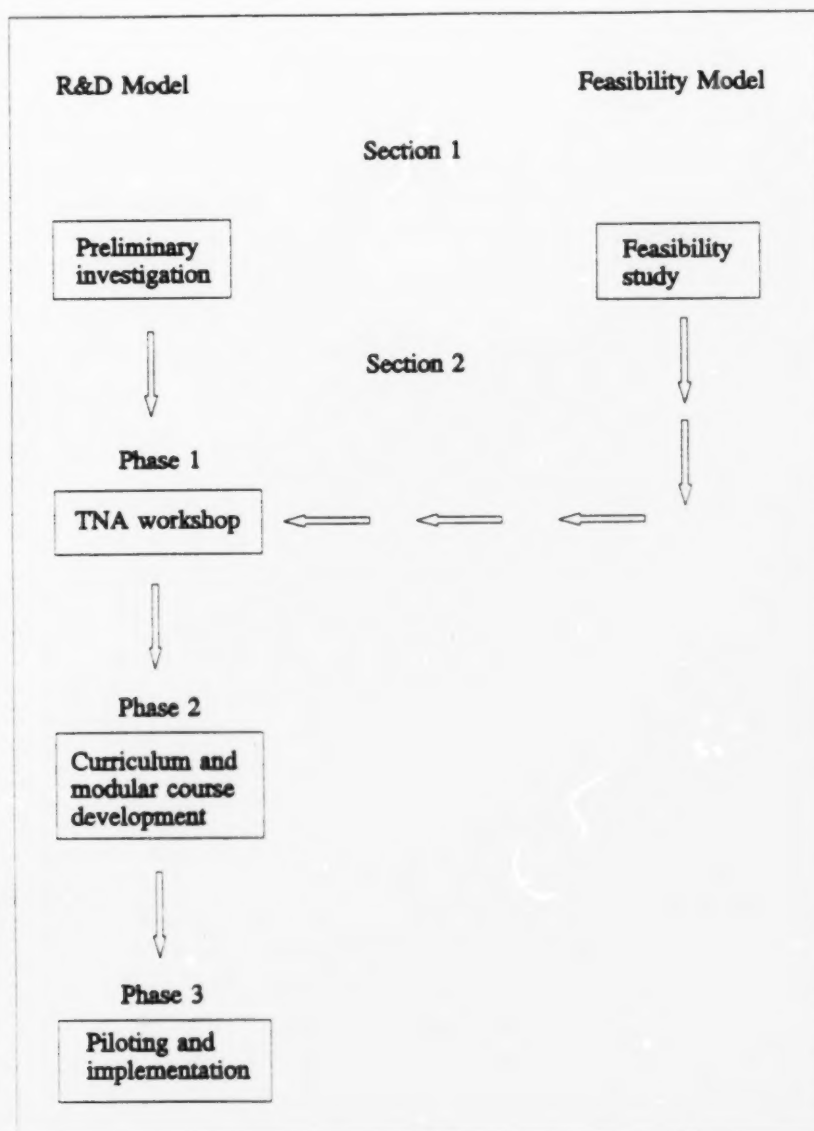


Figure 2: Comparison of 2 Ways to Conduct and Implement Curriculum Research

In other words, the New Zealand Foundation for Conductive Education is already on the way towards the development of a national curriculum for those working in the field of conductive education.

CONCLUSION

The main purpose of this study was to investigate whether it is feasible to develop a national curriculum plan for those working in the field of conductive education. Based on the results of interviews and written data, the general conclusion, apart from one caveat, is that it is feasible to plan for:

- short-courses at the local level;
- an undergraduate degree course at the national level; and
- post-graduate courses at both the regional and national levels for professionals in both health and education.

The caveat concerns the time at which New Zealand would be ready to offer training at the undergraduate degree level. It is concluded here that as undergraduate training is some way down the track, future plans for training conductors in New Zealand should take into consideration what is happening overseas, especially in Australia.

In reaching this conclusion, the researcher investigated the literature in the field underpinning conductive education theory and practice, reviewed the training of conductors in Hungary, considered the models that are being used in especially the United Kingdom and Australia for the development of training in conductive education, and investigated New Zealand-based training both for conductors and for programme support staff. A central feature of the present study was an in-depth investigation by semi-structured interview schedules into the perceived training needs of those working in and around adaptive and alternative programmes. Findings indicated that there were widespread training needs for short courses, undergraduate training, and postgraduate courses.

In spite of the Pető Institute's reluctance to share its body of knowledge and experience on conductive education with outsiders, and its insistence that foreign parents, trainee conductors, and professionals go to Hungary to experience "pure" conductive education, there appears to be no valid reason why this training cannot be provided in-country. A reading of the latest literature from the United Kingdom, supported by research from Germany, indicates that with a certain degree of good will and support from local Hungarian-trained conductors, it should be possible to train conductors outside the Pető Institute in the future.

Although there is some doubt about how long it would ultimately take to introduce courses for training conductors in New Zealand (or in Australasia), this study could find no good reason why New Zealand shouldn't follow Hungary, Hong Kong, and Australia in providing postgraduate courses at university level for specialists working in, or interested in, the field of conductive education. Similarly, given the clear indications in this study of the need for a wide range of short courses on topics relating to conductive education, there is no reason why planning should not start immediately on the task of providing a range of off-the-job training courses for conductors, specialists, other programme staff, and parents.

While the off-the-job courses for conductors, other programme staff, and specialists can be arranged relatively easily with the assistance of local training providers such as universities, polytechnics, and colleges of education, providing training programmes for parents poses a logistics problem. Recognising that parents are already overburdened, it has been suggested that "structured" self-instructional teaching/learning aids based on video tapes could be used with a high degree of success to explain to parents the basics of conductive education, as well as related subjects such as child development, health services, and so on. Whatever is developed should fit comfortably into the New Zealand education and health systems and be based upon the needs identified in this study.

This study investigated suitable curriculum development models which the New Zealand Foundation for Conductive Education and local programme administrators should find useful in developing curricula. It is reiterated, however, that unless those running conductive education programmes in New Zealand take over the curriculum development themselves, there is always the possibility that it will be taken over by others with the result that the conductive education movement will lose control of its own destiny. It is therefore important, if a national course is developed, that the New Zealand Foundation for Conductive Education drives these developments in its own right and on behalf of its members.

Similarly, if short courses are developed at the local level, it is important, for the same reason, that the individual programme (or programmes) drive these developments albeit with support from the Foundation. Assuming that these courses in conductive education are developed according to the New Zealand Qualifications Authority's course approval and accreditation procedures, (and university course approval procedures if necessary), credits could be awarded for work done in conductive education at the local or national level which should fit into the qualifications and degree frameworks in New Zealand, Australia, and possibly the United Kingdom.

As with any new development, there have been "growing pains" in conductive education which are understandable in the short term. A number of "issues" impinging on, or exacerbating, future training efforts have been identified and commented on in a manner which should aid their resolution. Because these "issues" are common to most adaptive programmes it would appear that the New Zealand Foundation for Conductive Education is the most appropriate body to deal with them, if it is not already doing so. What is apparent from this study is that a few of these "issues" could prove troublesome in the long term if not dealt with in the immediate future.

Finally, as this study has determined that it is feasible to develop a national curriculum plan for training those working in the field of conductive education, recommendations are made in this report outlining action steps to bring over training initiatives. Divided into general and specific recommendations, guidance is thereby given to the New Zealand Foundation for Conductive Education to focus its attention on the essential next steps and, by so doing, point the way to a productive and healthy future for conductive education in New Zealand.

RECOMMENDATIONS

These recommendations are principally directed to the New Zealand Foundation for Conductive Education, the body which has taken the place of the National Working Party on Conductive Education. There is one general recommendation and 6 specific recommendations which elaborate on the general recommendation.

General Recommendation

1. It is recommended that the New Zealand Foundation for Conductive Education proceed with:
 - (a) developing a national curriculum plan along the lines outlined in this study to give guidance and direction to all those working in the field of conductive education in New Zealand;
 - (b) developing short courses on conductive education (and related topics) in conjunction with individual programmes;
 - (c) promoting the provision of training courses (preservice and inservice) covering the principles and practice of conductive education for health and education professionals;
 - (d) planning to train conductors for New Zealand, in the long term, taking into account similar developments in overseas countries; and
 - (e) consulting with New Zealand-based Hungarian conductors about developments in training relating to the provision of conductive education.

Specific Recommendations

It is recommended that:

2. The New Zealand Foundation for Conductive Education make contact with the New Zealand Qualifications Authority to:
 - (a) investigate the development of unit standards,
 - (b) explore funding for an appropriate group process approach to curriculum planning and unit standards preparation,
 - (c) consider qualifications "packages", and
 - (d) discuss the role of the Foundation in fulfilling the role of a national standards body.
3. Further research into conductive education be encouraged to help build up a strong empirically-sound knowledge base for conductive education in this country.
4. The "issues" outlined in the discussion section, which have a bearing upon the effectiveness of any training initiatives, be investigated by the Foundation in collaboration with the programmes, and resolved as quickly as possible.
5. Annual vacation workshops of from 4 to 6 weeks, be investigated as a means of providing conductors with an opportunity to work together in larger groups, and parents and children an

opportunity to experience 24-hour institutional-type support and training.

6. The National Association for Conductive Education (NACE) in Australia be contacted, and a liaison arrangement established, to consult, exchange information, and share resources in developing training programmes at all levels if mutually beneficial.
7. Further funding sources be investigated for other developments associated with a national conductive education curriculum plan, and associated components (e.g., for induction courses and materials, for employees, and for parents).

APPENDIX A
Two Interview Schedules

CONFIDENTIAL

Interview Schedule 5: Specialist/Professional (e.g., Paediatrician, SLT, Ed Psych)

Note: This interview schedule is for the following categories of specialists -

1. Doctors: Neo-natal Paediatricians;
2. Child Development Team: Physiotherapists, OTs, SLTs, VNTs;
3. Special Education Service: Early Intervention Team.
4. Other Professionals: Executive Manager CCS, Psychologist, etc.

Programme:

☐ ₁

Date:

☐ ₂

Location:

☐ ₄

Name:

☐ ₃

Official Position:

☐ ₅

1. What do you understand by conductive education?

☐ ₆

2. Who is it for?

☐ ₇

3. As an educational programme, how effective is Conductive Education? ☐,
(Probe: Is it effective for all parents and children?)

4. (If respondent indicates effectiveness) Why is this so? ☐,

5. Are there any barriers to introducing conductive education nationwide?

Yes No

☐ ₁₀

6. (If barriers are mentioned) Please explain:

☐ ₁₁

7. Would you be interested in learning more about conductive education?

Yes No

☐ 12

8. (If Yes) What specifically?

☐ 13

9. Should courses for trainees going to work in special education include content (i.e. information) on conductive education?

Yes No

☐ 14

10. (If Yes to Q 9) What content in particular?

☐ 15

11. If you had a choice between a post-graduate course on neuro-developmental intervention or conductive education which one would you choose?

- (a) Neuro-developmental intervention _____ ☐ 16
- (b) Conductive education _____ ☐ 17
- (c) Both _____ ☐ 18
- (d) Neither _____ ☐ 19

12. (Following from Q 11) Please explain your choice. ☐ 20

13. From your perspective can you identify any training needs in people involved in conductive education? Yes No ☐ 21

14. (If Yes) Who?

☐ 22

15. (Following on from Q12) What are their training needs?

☐ 23

16. Can you think of any other Conductive Education training-related matters
that I have not yet raised?

☐ 24

Many Thanks

CONFIDENTIAL

Interview Schedule 6: Parents or Caregivers

Introduction - Reason for the research and expected benefits for the children and parents.

Programme:

☐ ₁

Date of Interview:

☐ ₂

Number in the group:

Parents

Caregivers

☐ ₃

Reasons for a group interview:

General procedure for interview:

Recording method:

Time allowed: 2 hours

1. What does Conductive Education mean to you?

☐ ₄

2. How successful do you think the Conductive Education programme is for you and the children?

☐ ₅

3. Have you had any experience of an alternative to Conductive Education?

Yes

No

☐ ₆

4. (If Yes) How successful was the alternative?

☐ 7

5. Are you happy with your role in Conductive Education?

Yes No

☐ 8

6. (If No) What would you like to see done about it?

☐ 9

7. Is there anything about the running of the Conductive Education programme here in _____ that you would like to change?

Yes No

☐ 10

8. (If Yes)

What? _____

☐ 11

How? _____

☐ 12

9. Do any of you feel you need more training to help in the Conductive Education sessions?

Yes No

☐ 13

10. (If Yes) What training would you like? From whom?

What training?

☐ 14

From whom?

☐ 15

11. Do you need more training to help you with the children at home?

Yes

No

☐ 16

12. (If Yes) What training? From whom?

What training?

☐ 17

From whom?

☐ 18

13. In your view, does anyone else connected with this Conductive Education programme need training?

Yes

No

☐ 19

14. (If Yes) Who? What training do they need?

Who?

☐ 20

What training?

☐ 21

15. In closing is there anything else that you would like to discuss about the programme or training that has not already been covered? ☐ 22

Many Thanks

APPENDIX B

Pető Institute Curriculum⁸⁷

ANDRÁS PETŐ INSTITUTE FOR CONDUCTIVE EDUCATION OF THE MOTOR DISABLED

Curriculum Outline for Training Conductors: A Four Year Diploma

Aims and tasks related to the training of conductors

The primary aim of conductor training is to form an up to date cultural standard, attitude and orientation that enables the trainees to deal with dysfunctional persons within the framework of the system of conductive education in an integrated and synoptic manner, and to rehabilitate the motor dysfunctional people.

The basic tasks of the conductor training are the following

- to train students of conductive education to prepare the motor disabled at every stage of life, providing sufficient professional knowledge, ability as well as skills in utilising them,
- to provide the necessary knowledge, skills and competence to assess the dysfunctions, to learn about and to develop the personality and the community, to work out an optimum conductive development programme, to plan and to realise conductive education,
- to raise the interest of students in sciences and self-education, to develop the skill of innovative thinking necessary to perform conductive education and to introduce the methods of research, development and experimenting related to the activities of the conductor.

Principles of the training

Since conductive education is a special subject, it is a new, independent and complex field of science. In the course of training the general, basic and special studies do not only complement one another, but they form a new kind of complex, systematized quality of knowledge through the interrelation of the various parts.

Due to the purpose of training, the different branches of science are inseparably related to one another in the network of the subject programmes.

They always relate to the experience. The different studies make up an arranged system of knowledge, integrated in accordance with uniform aspects. At the same time the subsystems - preserving their relative scientific independence and utilizing continuously the new scientific results - contribute to the realisation of the aim of the training from different approaches.

⁸⁷ This has been taken directly from the original which is not always grammatically correct.

The curriculum of the conductor training continuously guarantees and provides a structure and union of theoretical and practical training, the interrelation and systematic structuring of theory and practice during the entire course of training.

The process of the conductor training is based increasingly on the active and responsible practical activities, independence and creativity of the students.

The training covers topics in which students are expected to participate in group, small group and individual (theoretical and practical) intensive activities providing and improving knowledge, skills and expertise as well as the capacity to realise and identify problems and problem solving which are indispensable qualities for entry into their profession.

Structure of the training of conductors

The completion time of conductor training is 4 years (8 terms, each for a 16 week period).

The weekly commitment is changing in every term, minimum 30 and maximum 36 classes.

College and university graduates for participation in conductor training are obliged to present the approved qualification and provide the officially accredited completion of studies necessary for qualification. After handing in the certificates, the director of the Conductor's College decides with regard to the purpose of the training and to the previous studies of the candidate, whether credit can be granted for some previous studies or if the candidate is permitted to meet the requirements in a manner different from the general manner. The senior lecturers provide the syllabus of subjects in accordance with the directives of the course programme. The approval of the course syllabus; the construction of the timetable and the proportion of the lessons' numbers; the determination of assessment's requirements are the responsibility of the College Committee.

Students are required to meet certain requirements regarding the various studies every half year (examinations, reports, assessment on their practical work, etc.). The number of examinations to be taken every half year does not exceed 6.

Conductor training is concluded after having met the study requirements determined over the eight terms by writing and defending a thesis and by passing a state examination. After the acceptance of the diploma thesis and having passed the state examinations successfully, the candidate obtains a diploma which represents the highest qualification in this profession, and in this way, the candidate becomes a graduate conductor. The diploma in conductive education entitles the holder to practise conductive education of persons who became motor disabled due to central nervous impairment.

The content of training

General studies

Philosophy

History of culture in education

Ethics

Physical education

Foreign language (Hungarian for foreign students)

History of Hungary

Basic subject related to pedagogy, biology and psychology

Education theory

Teaching theory (Logic)

Education history (Universal)

General, development and educational psychology

Psycho-diagnostic studies

Functional anatomy, physiology, pathology

Functional neuro-anatomy, physiology

Paediatric studies, school health care

Intrauterine development

Neuro-psychology

Functional neuro-pathology

Studies related to the improvement of the production of sounds and speech

Methods of pedagogical research

Complex and special subjects:

1. Symptom studies
2. Unit of subjects in general conductive education
3. Unit of subjects in special conductive education
4. Methods of rehabilitation
5. Conductive education of Kindergarten aged children
6. Education of language and hearing
7. General teaching of the mother tongue (reading, writing, grammar, speech)
8. Visual teaching

10. Music teaching
11. Nature and environment
12. Mathematics

5-12. their role in the method of conductive teaching, their system of requirements and methods.

Practical training

Continuously, throughout the eight terms: individual, complex practical experience, practical experience in groups and small groups, participation in workshops.

Studies outside the classes:

- orthotics, methods of neurosurgery, orthopaedics
- methods of preparing equipment
- education technique
- scientific research to be performed by students.

A basic condition of applying for participation in training: the candidate has passed the final examination with distinction.

In the first two years teaching is carried out in two languages (in Hungarian and English), and from the third year in Hungarian.

Examination Themes for the Final Exam: 1993 Fourth Grade⁸⁸

1. Difference between analytical, synthetic and global exercises. Bio-mechanics, orthoses, prevention of deformities. The system of aims and objectives in conductive education.
2. Analytical and neurophysiological features in Phelps's method. Phelps: conditioned, confused movement, co-contraction.
3. Analytical and fusional and physiotherapies.
Kabat's and Rood's method.
(Rhythmical stabilisation, pattern, movement against resistance, synergical connections facilitations)
4. Global exercises and the system of aims and objectives in conductive education. Bobath's theory of reflex inhibition, sensomotorical and developmental neurological treatment - Empiricism.
5. Enumeration of different physiotherapy and relaxation methods and the system of aims and objectives in conductive education. Relaxation therapies.
6. Vojta, Doman Delacato; postural reactions, developmental neurologic gymnastics. The effect of theological knowledge of rehabilitation.
7. Elementarist learning, conditioning. Behaviourism. Behaviour therapy. Biofeedback therapy.
8. Group therapies, group sessions. Psychosomatic education. Art therapies. Psychomotoric exercise. Benesh movement notation. Music therapies.
9. Different aspects of developmental neurologic exercise. Difference between the aims of various rehabilitation methods.
10. Interpretation of intention (speech) in conductive education. Means used in different methods. The neurophysiological, mechanical and educational interpretation of facilitation. (Motivation, intercommunication, cognitive aspects).
11. The Gestalt view.
12. Frostig: Perception development, perception testing. Task analysis, ability training.
13. Internalisation. Vygotsky, Piaget, Leontieff, Galperin, Luria. The essence of Piaget's theory of cognitive development.
14. Forerunners of the new education. Active learning. Rousseau, Claparede, Pestalozzi, Dewey, Decroly, Montessori, Freinet, Ferriere.
15. Plasticity in sensory-motor systems, Tolman's view on behaviour. Lashley's view on movements and learning. Taub, Berman's experiment. The role of afferent input.
16. Humanistic psychologies.
17. The differences of the inter- and trans-disciplinary systems. Complexity and unity of the

⁸⁸ This is taken from a copy of Dr Hari's 1993 examination paper for fourth-year English-language trainee conductors.

programme. The interconnection between groups and activity fields. The organisation of the group.

18. The use of devices. Orthopaedic treatments. Electrical stimulation. Foot deformities. Scolioses. Ataxia. Sclerosis mpl. Parkinson. Hemiplegia treatment. Speech, respiratory function. Detrusor function.

Fourth Year Exam Paper - 1993⁸⁹

In the fourth-year examination paper there were 14 separate sections divided into 2 questions each (A and B). Students were required to answer only one A and one B. To illustrate the type of questions and the depth of questioning 3A and 3B have been given below:

- 3A Educational, physiological and psychological characteristics of the determinants of success. Significance of rhythm and intention in conductive education as a means of facilitation. Individual rhythm. Rhythm gradually becoming interior, the process of how connecting rhythm with speech is left off.
- 3B The specific aims of conductive education and the way of achieving these aims in phasic groups. Models and possibilities of implementation in the practice.

⁸⁹ These questions were obviously translated from Hungarian into English so that the grammar is not always correct.

APPENDIX C

University of Melbourne Curriculum

GRADUATE CERTIFICATE IN MOTOR DISABILITIES IN YOUNG CHILDREN: APPLYING THE PRINCIPLES OF CONDUCTIVE EDUCATION

Course Outline:

Unit 1: Theories and Issues in Conductive Education (33 Hours)

Conductive Education Theory, Philosophy and Background
Neuropsychology and Neuroanatomy of Learning
The Role of Movement in Learning (Parts 1,2,3 & 4)
Life Span Issues
Conductive Education Related to Specific Disabilities
Developmentally Appropriate Curriculum, Environment and Expectations (Parts 1,2,3 & 4)
Family Centred Approach and its Relationship to Conductive Education
Programmes for Children of School Age

Unit 2: The Application of Principles (39 Hours)

Functional Movement (Parts 1,2,3 & 4)
How a Program is Designed to Implement Good Learning Practice
Factors Which Influence the Success of a Group

Unit 3: Practicum (24 Hours)

The Objectives of the Supervised Practice Sessions are:

1. Conduct/lead a program for a full morning 9.20 am - 12.30 pm
2. Work with two different children on two other mornings
3. Act as an assistant conductor/leader for a full morning

Course Assessment:

1. Two essays of 3000 words from a list of topics.
2. Practicum Assignment (Individual).
3. Practicum in Group Program (Unit 3)

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